

THE CANARY:

ITS

MANAGEMENT, HABITS, BREEDING & TRAINING

WITH

DIRECTIONS FOR PREPARING SHOW-BIRDS.

BY

GEORGE J. BARNESBY.



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THE CANARY.

FRINGILLA CANARIA. Linn.—SERIN DE CANARIE. Buff.—DER
CANARIENVOGEL. Bech.

DESCRIPTION.—Much has been written concerning the Canary, which is kept and reared throughout England and the whole of Europe, and even in America, Russia, and Siberia. The uninitiated are not aware of the extent to which the Canary is bred and cultivated throughout this country. This bird is stated to be a native of the Canary Islands, where it breeds on the banks of small streams in the plea-

sant valleys of those delightful islands. It has been known in Europe since the commencement of the sixteenth century. The arrival of this bird is thus explained :—A ship, which, in addition to other merchandise, had a multitude of Canaries on board that were consigned to Leghorn, was wrecked on the coast of Italy, and the birds which thereby obtained their liberty, flew to the nearest land. This happened to be Elba, where they found so propitious a climate that they multiplied without the intervention of man, and would probably have naturalised themselves had not the wish to possess them been so great as to occasion their being hunted after till they were entirely extirpated. In Italy, therefore, we find the first tame Canaries, and they are still reared there in great multitudes. At first their rearing was attended with considerable difficulty, partly because the mode of treating these delicate strangers was not sufficiently understood, and partly because the males chiefly, and not the females, were brought to Europe. There is much difference in appearance of plumage compared to that of the birds said to be of the original stock. Darwin's supposed natural law of selection, climate, domestication, and food, may have tended to bring forth specimens now so different in colour to the Canary of past ages. The birds, subsequent to their domestication in Belgium, Germany, and England, it is asserted, threw up small patches of lighter or yellow feathers, and the breeders, by carefully matching those birds that bore the largest number, succeeded in obtaining bright and uniform colour more resembling those of the present date.

Their original colour was that of grey merging into green beneath, almost resembling the colours of the Linnet, which, by the above means and intermixture with other birds (in Italy with the Citril and Serin, in Germany with the Linnet, Greenfinch, and Siskin), has become so multifarious that Canaries may be met with of various colours, individually

seen in every degree of shade or combination, and thus presenting innumerable differences. Those which, like the Linnet, are blackish grey, or greyish brown above and greenish yellow beneath, more like a Greenfinch, are the strongest, and approach the most closely to the original colour of their progenitors. Were it not fully proved that the Canary birds were natives of the Fortunate Islands, we might attribute their origin to the Serin and Siskin, or to the Linnet, Greenfinch, and Citril. Birds of the two first species have been seen bearing exact resemblance to that variety of the Canary called the Green. As to the direct origin of the various specimens of some of our choicest breeds—for instance, the appearance of the Lizard, London Fancy, Cinnamon, and others—nothing positive can be arrived at. That such have been bred before the memory of the “oldest inhabitant” of our present generation, and, further, that the breeds existed in past ages, there are printed records to prove. In a work dated 1709, as many as twenty-eight varieties are mentioned, comprising nearly all those known at the present period. It is thus far satisfactory to know their original colour. How the changes in some have been effected, there can be no possible means of ascertaining more than above stated. There is no doubt that in selecting and matching, much has been achieved in the way of improving the many beautiful varieties I shall presently have to describe.

I will here allude to the Belgian Canary, concerning which less has been known or spoken of until late years. That the breed is a foreign importation is well known, but as to its origin, nothing more can be ascertained than that they have been bred in Germany, France, and Holland, and imported into this country at very high prices. Their cost depends upon the colour and form of the bird. That “selection” has been studied, by pairing and breeding together those of the greatest length, until varieties were at last found

to be possessed of the form peculiar to the "Belgian," is natural to suppose. That there is ground 'for arriving at this conclusion is founded on the fact that there are fanciers who have educated themselves to at length perceive a beauty in something approaching distortion, and an excellence in deformity. I will illustrate my meaning by quoting a few practical examples. "A certain variety of cow is found to possess a long horn. Every effort is made to increase and propagate this peculiarity, until cows are produced whose horns are so long and unwieldy that they can feed only from specially constructed troughs; or, if these long-growing, artificially produced horns take a curved direction inwards, they grow through the cheeks of the poor creatures whom the caprice of men has invested with such extravagance. Others take an opposite course, and cause them to be born without this graceful appendage, and to go through the world harmless and defenceless. Look, again, at poultry. The Spanish fowl, characterised by a white cheek, is produced until it comes to be formed of a series of tough wrinkles of bleached skin, which encroaches upon the eyelids, and so practically to blind the bird; and this is considered by the 'fancy' as a beauty. The short beak of the Almond Tumbler is made so short that the poor bird is rendered somewhat dependent upon man for its subsistence, the organ provided by nature for the picking up of its food having been shortened until it almost becomes incapable of fulfilling its functions. Again, the small foot of the Chinese, and the flat head of some Indian tribes, are other instances which are considered beauties to those whose tastes have been perverted by early associations; and birds also, which are apparently deformed (for example, the Belgians), and appear ugly and painful to most who look at them at a show, are, notwithstanding, considered 'the pets of the fancy.' The especial excellence

consists in their length, the curvature of the upper portions of the spine, and in their ability to assume a certain height by the straightening of the lower (tarsal) joints of the legs."

The Canary in size resembles that of the Linnet, being about five inches long, excepting the Clear Belgian, Manchester Coppy, Scotch Fancy, and Yorkshire, the three former breeds being much longer. The beaks are generally whitish (except the Lizard's, which is black), stout, and sharply pointed. The legs are mostly flesh-coloured. Here, again, the legs of the Lizard should be black; the legs of variegated birds are sometimes dark. In some instances the females can scarcely be distinguished from the males, but the latter have generally deeper and brighter plumage, being more fierce about the eye, and brighter and smarter in shape throughout the body. The temples and space about the eyes are always of a brighter colour. Males are easily known by breeders of experience, although there are cases when bird-keepers of great practice may be mistaken in deciding the sex of birds.

If you prefer a Canary songster—one to please the eye and ear—either a Norwich or a Yorkshire bred bird will be suitable, if it has been well tutored. The Norwich are not so long as the Yorkshire in shape, but much deeper in colour. Neither of these birds are equal to the German song-birds as regards sweetness, continuity, and change of notes, but have the advantage of being longer lived, and will afford ample harmony for an ordinary taste. Unfortunately the German birds are generally very inferior in plumage, and on an average not one in a dozen will, in this country, live beyond a year. When brought to England they are stimulated and fed high for the purpose of exciting to a freedom of song, and when sold and passed into the hands of others, they are generally kept on the ordinary diet of Canaries, when, if they do not fall off in song, the moulting season affects them, and they often either discon-

tinue singing or die off. Many breeders purchase German songsters for the purpose of learning young birds to partake of their notes. Such birds may be bought at prices ranging from 6s. to 25s. each. To keep song-birds in good condition they should not be pampered with sugar and other sweets, or have a too free supply of hemp-seed, which feeds them fat and gross. Clean water daily, fresh grit sand once a week, and good sound Canary-seed, with an occasional treat of a mixture of hemp, flax, scalded rape-seed, and now and then a few groats and a little maw-seed, and also a sprig of either groundsel, plantain, or water-cress, is conducive to good health, and these, with a little of the German paste, will be sufficient to keep birds in good condition. Of course this diet must not always be given, but changed. If you wish birds to become familiar they should neither be teased nor frightened, but now and then have given to them a little crushed biscuit, or a small portion of egg or light egg-pudding in the way of a treat. It is astonishing what can be effected in the way of training birds, when only one or two are kept, and there is plenty of time and patience to devote.

MOULTING OF CANARIES.

To prove what high feeding and treatment effects, we have evident facts respecting the horse, beasts, sheep, dogs, poultry, and other animals. As an example, see what an improvement is made in the appearance of their coats and plumage by attention.^a Epictetus says of the sheep—"For as the sheep do not give up again the grass they have eaten to show how well they are fed, but prove the goodness of the pasture and their own case, by concocting their meat well, and bringing a large fleece, so must you approve

the excellence of your doctrines to the world, not by disputes and plausible harangues, but by digesting them into practice." So it is with Nature throughout. All living things were sent for man's use, for him to exercise his skill and knowledge, and to improve upon. In treating and feeding birds during moulting every attention must be paid.

At about the age of nine or ten weeks, young birds commence to moult, and the time occupied in passing through this sickness lasts about eight or nine weeks. Some moult more freely than others. If matters proceed satisfactorily, the period from the chipping of a bird until it is clean moulted or fine, extends to about sixteen or eighteen weeks. The early hatched are generally a week or so longer than others before they begin to moult. The latest hatched moult the quickest; for, being bred at a time when the season of the year is most sultry (July), and reaching the age of eight weeks in September, when an autumnal change affects the birds' system, this causes them to cast more rapidly than earlier hatched birds. When a Norwich bird is seven or eight weeks old, it should be put in the moulting-cage or place assigned for them, and the marigold flowers given for them to peck or eat. Many breeders have the advantage of special moulting-cages or snug corners free from draughts for their young stock, and, as the birds attain the age I have mentioned, keep putting them in, only do not allow them to become too numerous in their respective places if they are not sufficiently spacious or adapted. Perhaps at the commencement they will refuse to eat the flowers and waste many; this cannot be avoided, and does not matter, so that, by keeping them supplied, and being somewhat spare with the seed, you are learning them to eat the marigolds. At this period you have no cover over the cage to darken it, but, having one ready, you begin at first to partly suspend it over the cage-front; for, were

THE CANARY.

you to place the birds in almost total darkness at the beginning, very possibly they would not be able to find food. As you perceive the birds becoming more fond of the flowers, so increase the covering over of the cage until you place your birds in a state of semi-darkness. During the moult supply no other but Canary-seed, and no green food whatever, or you will counteract the food they will have to partake of—*viz.*, Canary-seed, marigold flowers, and saffron-cake and solution. A piece of suet now and then may be placed betwixt the wires, or a little linseed given (if they will eat it), which will make up for all deficiency in not supplying them with hemp-seed at this time, which is a most injurious food for the stomach of a young tender bird. Too much hemp-seed at any age I have found has a too softening tendency: it does very well at breeding time for the old birds, and has a stimulating effect. Rape-seed should not be given to young birds during the moult; it is too drastic, and a free supply will often affect older Canaries. It should always be scalded before given. As a general rule, I advise these matters. There may be exceptions, and possibly Mr. So-and-so's birds may have done well, but my long experience practically, and the experience of numerous others, who think as I do, is proof that a too heating, oleaginous diet, will cause more young birds to become soft or disorganised in their bowels than when kept on good sound Canary-seed.

Common sense ought to convince one that sound Canary-seed, which supports both bone and muscle and keeps the feathers hard, is better than a free use of hemp, which tends to loosen or relax the system, and encourages a gross fatness. During moulting, when beetroot or carrot is sufficiently grown, you may cut slices, and, after scoring them both ways with a knife, give them to your birds in the raw state. When the birds have become more familiar to the

darkish state of the place or cage, draw the cover entirely over the front, for it is necessary that they be kept in this state during the growing of the feathers, it also keeps the birds more steady, with less liability to damage their new feathers. During this period of feeding in the dark, birds become sufficiently plump and fat. Supply fresh marigold flowers two or three times daily, and do not omit to continue them as often as I have named throughout the moult, and even after they have done moulting; and, as long as marigold flowers can be obtained, persevere to the utmost by feeding with them. At the finish of the moult the flowers are as necessary as at the commencement, for it is often this persevering finishing touch that will decide between two birds when they come before the eyes of a judge. Do not give your birds any of the green leaves of the marigold—nothing but the actual heads or flowers. To have a good supply you should grow successive crops. Sow one bed in March, and another early in June; for the latter sown will supply you when the first flowers are gone, and it is most essential you should have them as late in the season as possible to treat the later hatched young. Be sure your cover is well tied or drawn over the entire front of the moulting-place, for it is necessary to keep draughts of cold air from the birds, and also to prevent the light getting in. Give your birds during moulting strong saffron solution, and a solution of cochineal only to drink, and so supply it that they cannot wash in it. They are both harmless, but necessary in assisting to improve and striking out well the rich orange-tinted feathers so desired and satisfactory to the eyes of a breeder and exhibitor of Norwich birds. Let the cover over your cages be of a close stout texture; a thin open one is bad. Do not use paper, unless you wish to alarm or disturb your birds every time you look at them; the birds make holes in it, and it is ill adapted for

the purpose. Besides the cover over the cages, draw a blind over the window to keep out the power of the sun.

In a cage eighteen inches square, two birds can be moulted together, if they will agree. Some are very pugnacious. Sort out the best shaped, or most likely-looking male birds for moulting for exhibition. If you are possessed with a large fly, or spare room, numerous birds can be moulted together. In that case you must darken as much as possible the window or sky-light. I have moulted as many as fifty and upwards at one time, with much advantage, and without them pecking or damaging one another during the casting of their feathers. If kept dark, they cannot see to peck each other's shoulder-feathers, as they frequently will when together in a light place. If a bird once draws blood from another in the quill or shoulder-feathers, it is better to remove the injured one at once, or others will learn the bad habit, and cause much annoyance. Lizards, Cinnamons, and Crested birds can be moulted together in a fly very well in the dark, and for the sake of keeping the plumage in good order, occasionally supply a bath. The one I use is large, and two and a half inches deep, into which ten or a dozen birds can tumble at once. This I place on a wire stand of about the same height. When the birds have bathed, take away the bath, and let them have only the solutions. The cake with which you must feed the birds during moulting, can be made by beating well in a basin three or four eggs, to which afterwards add three pennyworth of saffron made into a solution with about half a wine glass of soft water; in another basin beat up a quarter of a pound of butter, to which add the same quantity of moist sugar. Put all together in one basin, and add about a quarter of a pound of flour. Before you place it in the baking-dish supply a teaspoonful of the baking-powder, and grease your dish. The cake will keep for many days,

if not where it is too damp. With this also feed your birds during moult. London Fancy birds are generally moulted in box cages, and they too are kept well closed down. The above cake may be supplied to them, or they can be fed on the yolk of egg and savoy cake, without which their appearance is not much improved. The moulting or box-cages have glass slides, and when the birds are first placed in them the slides should be partly opened. A graduated system with them, as with the Norwich, is at first adopted until the slides are entirely closed. To obtain first-class moulted London Fancy birds much attention is required, or the birds are not what are termed clean moulted, and they present many small dark ticks in their body feathers. The greater the attention the more you will meet with success. The Belgian breed of Canary requires very different attention. They can either be moulted in partitions or in cages. With this breed colour is not so much an object as position, although the higher the colour with the position also the better they are. It is not necessary to feed on the marigold flowers, although some of the saffron-cake, mixed with crushed biscuit, to which can be added a few drops of port or sherry wine, forms, in addition to Canary and millet seed, a good diet. Their cages should be covered with a cloth to keep them free from cold air or draught. No green food or hemp-seed should be given, and keep a piece of suet for them betwixt the wires. A bath may occasionally be given, and so fix their perches that they will be able to easily reach them after the bath. A little bread soaked in cold water and afterwards squeezed out, with a few drops of cod liver oil added, and now and then some maw-seed and groats, will assist them much during the moulting sickness. A little of the best pale sherry at times blown over them with the mouth in a dewy cloud tends to get them well up and improve their stand.

It is rarely these birds require handling even when being removed from one cage to another. A few lessons during the age of six or seven weeks, by directing or driving, or, as the fancy term it, "running them out," for the purpose of showing true Belgian form, soon brings them into the habit of leaving one cage for another. This tutoring is effected by the aid of a small wand or thin cane used when the wire show-cage is placed against another, which the birds are required to leave. A slight additional length may be obtained by drawing out their longer flights and tail nestling feathers, but this should not be done within six weeks at least of exhibiting them for show. The most ready way is to hold the bird back downwards in your left hand, and securely pressing the last joint of the wing between the left thumb and finger, with the right you draw the feathers. The most ready way of extracting the tail is, after you have caught the birds, open the cage-door, and showing or holding it on the front of the door place, a slight jerk will cause the birds to fly and "leave their tails behind them" betwixt your right thumb and finger. Aged birds have sometimes great difficulty in casting their outermost flight feathers; in this case it is necessary that they be drawn. Belgian birds in particular lose confidence in their stand by the nails becoming too long or sickle shaped, and which should be carefully cut. Supply your birds well with grit-sand, to which add occasionally some old crushed mortar and chalk, also now and then a small piece of salt. They will not eat more of the latter than will do them good.

BIRD EXHIBITIONS.

DURING the past fourteen or fifteen years, exhibitions of birds on an extensive scale have been held in various parts

of England. Previous to that time they were of somewhat uncommon occurrence, the shows generally being conducted in a close manner, by a few individuals, at public-houses, thus preventing their beauty and song being appreciated by the general public. Birmingham and Nottingham were among the foremost towns where these shows were publicly held, followed in quick succession by exhibitions taking place at the Crystal Palace, Southampton, Derby, Oldham, Gloucester, Norwich, Brighton, Plymouth, and afterwards Hanley, Sunderland, Middlesborough, Newcastle, Ipswich, York, Northampton, Leeds, Stockton, Berwick on Tweed, Lowestoft, Sheffield, Leicester, Burton on Trent, Leek, Macclesfield, Whitehaven, and numerous other towns, until they have extended throughout England. Bird exhibitions have also been held in many parts of Scotland, and also in Ireland. In the year 1857, an All-England show of cage-birds was held at Nottingham, and I was so satisfied with the entire arrangements, that I ventilated the matter in *The Field*, dated March 28:—

“CANARY BREEDING AND POULTRY SOCIETIES.

“SIR.—Being a constant reader of your valuable journal, I have with much pleasure noticed the remarks on Canaries. With respect to those beautiful melodists forming a distinct part in poultry shows, I can only say a more interesting sight was never witnessed than at the Nottingham Exhibition. Were they (the birds) paid more attention to than they are, they would not only tend to make home more cheerful, but would, in my opinion, be a great acquisition to poultry societies. If distinct classes for Canaries were set apart, I feel sure it would assist in supporting societies, as the number of entries at the late Nottingham show will prove. No expense is incurred in providing cages, for the birds are sent to the exhibition by the owners in cages (mostly new for the occasion), which have only to be arranged on stages provided. It was the general remark at the Nottingham Poultry Show that nothing exceeded this (the Canary) department in beauty and interest. The centre of the room was tastefully arranged with evergreens, which were interspersed with crowns and banners, surrounding which ran tiers of

covered shelves for the numerous cages. A good passage for the visitors being left, they were enabled to examine and admire each of the birds, and feast their sight and curiosity on the tiny warblers. To breeders especially it was a "rich and rare" sight to witness so many truly beautiful bred birds. Being myself a Canary breeder, I may, perhaps, take more interest in the subject than others; but it is my firm conviction that, if a separate department was made in Poultry Societies for Canaries, and if breeding them was more generally entered into, societies would flourish better, and it would tend to cultivate the minds of those who take part in this interesting pastime.

"(Signed)

GEO. J. BARNESBY.

"Derby, March 23, 1857."

Since that period the bird cause has flourished much, and numerous exhibitions have taken place. Those most attractive, and on an extensive scale, have been held in the Crystal Palace, Southampton, and Sunderland. With respect to the show held at the former place, nothing which takes place in that palace of grandeur and delight can possibly surpass in interest the great annual bird show, collecting together, as it does, in a structure so admirably adapted for the purpose, the finest specimens of birds from various parts of England. As beautiful and as charming as the Palace is, with its music, fountains, terraces, walks, ponds, statuary, gardens, and galleries, still I think an additional charm is added when the annual bird show is held. No exhibition elsewhere is carried out on so vast a scale; and I may assert, that the excellent arrangements of the manager, Mr. J. Wilkinson, and the able staff of officials, afford to the many exhibitors the fullest confidence that their delicate pets receive every attention possible under their care, and are well packed when returned to their owners. What can be a greater treat than a visit to the Crystal Palace annual exhibition of cage-songsters? A short run by rails from the London stations, through the busy outskirts of the metropolis, and conveying

one through a very pleasant part of Surrey, quickly reaches Sydenham. On entering the Palace, the bird show, which takes place in the tropical part, is soon found, and where hundreds of finely-coloured and plumed British and foreign birds, and Canaries and Mules, are pouring forth their sweet music. It has been truly asserted that—

“When birds of fine feather are gathered together,
Well clothed in their colours so bright,
’Tis a sight worth seeing by each human being,
Not only by day but by night.”

The climax of delight and astonishment is here attained, and you pause and ponder for a time over that you have seen. This may be realised at the annual show, which is visited by so many fanciers and others who interest themselves so much about our song-birds.

To give an adequate idea of the show, I may state that the number of birds entered for exhibition, in the year 1870, reached 1191. In the two first classes of Canaries (clear Norwich), those for competition were 125, no slight task in itself to pick out half a dozen birds for honours. The entire entries of the Canary and Mule classes reached 783, and from this number, to that of 944, were included the British birds, and birds of passage and migratory birds. The remaining classes were confined to the various foreign birds and extra stock, thus reaching the total number of 1191 entries. No one need envy the labours of the judges, Messrs. Barnesby, Moore, and Wilmore (for Canaries and Mules), and Mr. Goodwin (for British and foreign birds). Since that year the show has lost an efficient judge of British and foreign birds, through the death of Mr. Goodwin, whose place, however, for the show of 1871, was ably filled by the appointment of Messrs. J. Jenner Weir, F.L.S.

and Harrison Weir, F.R.H.S., assisted by Mr. F. W. Wilson, of the Crystal Palace.

Between the months of October and March is the best time to hold a bird show, owing to the fine state of plumage the birds are in, and at a time of the year when they are not required for breeding with. Exhibitions are sometimes held during the summer months, but they cannot possibly receive that support from the fanciers, who have most of their best birds up for breeding. Still, I have witnessed some capital exhibitions; for instance, the one held in connection with the "Grand Yorkshire Gala," which takes place in the month of June. At the show of 1871 there were upwards of three hundred specimens for competition (one hundred more than the show of 1870). There is even one advantage gained in holding a summer show, which is obtained by offering prizes for young birds, or those bearing their nestling feathers. There is much pleasure to be derived from a combination of birds and flowers. Those who love birds can gratify their ears with the gushing peals of melody ever bursting forth, or can fully enjoy the sweet fragrance of the flowers, which are "Nature's jewels, with whose wealth she decks her summer beauty." So vast is the interest taken in cage-birds, that at most of the largest shows exhibitors from distant parts assemble together.

ADVICE TO EXHIBITORS.

EXHIBITORS sometimes attribute blame to those who have the management of bird exhibitions, whereas it may have been caused through themselves not having acted in strict accordance with the rules or regulations issued. In filling up the certificates of entry make them out yourself, and do not trust others unless properly qualified. Always write

your names and addresses distinct; state the ages, sex, and breeds of the birds to be shown in the various classes, and fix a price for the sale of them. At the time of sending off the entries, forward also, either by cheque or post-office order, the amount of money entitling you to show, and securing for you a prize-list or books of awards. Fill up and return the certificates before the expiration of the time specified, for by neglecting this it is impossible that secretaries can pay due attention. Be sure and send off the birds for show so that they may be received in time to be judged, or they will not be noticed, and you will be put to unnecessary trouble and expense. Many prizes have been lost by the birds arriving too late for competition. Use substantial wrappers in packing, with your name thereon, and send tin vessels for water, which are better than glasses, and cannot easily be broken. When you receive the labels, and before again sending off, see that the proper ones are tied on the cages. Always send a sufficient supply of food, and pack your birds up so that they may be forwarded by fast trains at night, for it is better even your birds lose a little rest than food. Box, or wooden cages, with wire only in the front, are preferable for London Fancies, Norwich, Cinnamon, Mules, Goldfinches, Linnets, and many other small birds, and can be better packed. Belgians, Coppys, and Lizards show much better in suitable wire cages, and can be more advantageously examined by the judges. These will require more care in packing. By paying attention to the above remarks, disappointment will often be prevented.

HINTS TO SECRETARIES AND COMMITTEES.

THOSE who undertake the management of bird exhibitions should study all attention being paid to exhibitors, for it

is through their aid and support the requisite material is obtained in furnishing the stages. In commencing a new show it is unwise to issue too extravagant a schedule of prizes at first without reasonable chance of success, or of the show being continued from year to year. It is not solely through motives of gain that many of the best fanciers exhibit. Still, with proper management, an attractive schedule may be issued if assistance is obtained and solicited from ladies and gentlemen, who may countenance the matter with their patronage and purse. This will afford a guarantee for the success of a show, not only to those who bring it out, but will be satisfactory to exhibitors, who will thereby give their aid with a prospect of receiving their prize money. I allude thus, owing to some exhibitions having taken place merely with a speculative view, and if not a success the prize money has not been paid, or only a portion of such. This offers no encouragement for the future. The names and addresses of exhibitors can be obtained from catalogues issued of other shows. The time of holding an exhibition should be well considered, otherwise it might clash with one or others previously fixed. Sufficient publicity should always be given, and printed schedules forwarded by post. From the time of holding the show a period should intervene for the purpose of receiving the entries, issuing labels, and forming or compiling the catalogue. When entries are received, the secretary should acknowledge the receipt of the same, which will not entail much expense, considering the present cheap rate of postage; for if left until the labels are sent off, which, through bad arrangement, has occurred only the day before the birds have been sent to the show, and sometimes have not even been received in time, causes annoyance and inconvenience. Independent of this, when exhibitors send entries and money, it is proper and satis-

factory to know if each have been received. Another very important point is, that prize lists, when sent for, should be forwarded as early as possible, for it has too often happened that they have not been received even until the show has terminated, or the birds have been sent home. This neglect sorely tries the patience of an anxious exhibitor, which ought to be avoided, and could easily be, were an assistant or sub-secretary, or one of the committee appointed for the purpose. I know full well that secretaries have much anxious and harassing duty to discharge, besides at one particular juncture losing their rest in superintending and arranging for the exhibition; but still a prior appointment of a person to attend to the sending off the prize lists, as early as they are printed, will prevent unnecessary correspondence and unpleasant remarks. As most bird shows take place at a time of the year when the atmosphere is cold and chilly, it is necessary that the trains be waited upon for the reception of the birds as they arrive, and not allow them to remain in the cold. They should be taken to the place assigned, immediately unpacked, and fed. Canaries generally are very delicate, and proper care and attention may prevent the loss of valuable birds. When they are unpacked the wrappers should be secured and ticketed, and they will be easily known when again required. Much carelessness exists with respect to sufficient care not being taken of each exhibitor's covers or wrappers, and some who have sent both expensive and serviceable covers have been repaid with others of a valueless kind. They will not only be ready when required for re-packing, but each will get back his own property. A proper person, one used to birds, should be appointed to examine the whole of the birds on the stands or stages to see that they are well supplied with seed and water, for a little neglect in this way prevents many good birds being

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in fit condition to be properly judged, besides running the risk of the birds dying, and a loss ensuing to the owners thereby. No bird or birds ought to be allowed to be claimed before the time specified for the opening of the show to the public. One matter reprehensible in its way is that of a secretary competing for prizes. I have known instances where special prizes, in the shape of silver cups or medals, have been offered, and won by the secretary. This is much better avoided; let the competition be between those entirely unconnected with the arrangements. Secretaries and committees should pay all due regard to the funds at their disposal, and discountenance at all times a wasteful or extravagant expenditure. The paying or handing over the prizes gained within a specified or reasonable time after the show has been held has a very good effect for the future. One very annoying matter to exhibitors is having to pay unnecessary railway charges for separate parcels, caused through secretaries of shows or their officials returning the cages in too many parcels, whereas the use of an extra piece of cord for tying several cages together in one package would prevent useless expense to exhibitors. I have frequently experienced this annoyance.

THE APPOINTMENT AND DUTIES OF JUDGES.

IN appointing a judge or judges for a show, men of well-known ability and practice should always be chosen. Where a body of individuals are formed into a committee for the purpose of carrying out or managing an exhibition of birds, no one individual, either directly or indirectly concerned, should be placed in the position of judge, or should exercise in the slightest degree any duty in connec-

tion with the matter more than assisting to carry out the show to the utmost success. "No man can be a judge in his own cause if he is in any way concerned, more than a king can or should be allowed to conduct his own affairs of the state between himself and his people; or that physicians, when sick, should trust to their own skill before the advice of others; or that masters of the gymnastic exercises should be proper judges of their own exhibitions." By the same rule, a person should not be permitted to judge birds if he has any interest in any of the birds to be judged, either direct or indirect. Such has occurred in more than one case I know. But men of high-mindedness, and fully competent, intelligent, impartial, and discriminating, can be found to discharge this very important duty. The position of a judge, in whatever capacity he may be, is not an enviable one. Firmness, discrimination, patience, affability, and possessed of a thorough practical knowledge of his respective duties, are qualifications of vast importance in a judge, without which he cannot expect to find his pathway very smooth. With a clear and certain knowledge, the capacity of forming correct ideas, and having the faculty of uniting or separating those ideas, so as to arrive at a decided knowledge of what should constitute good or inferior specimens, possesses a man with the ability of giving right judgment. Sufficient time should always be set apart for the adjudication of the various specimens, for, unless this is studied, and a judge is hampered with too much work, a mere loose or hurried survey is likely to take place, unless assisted by another judge. In shows of great magnitude, and when the time occupied in judging extends over the entire day, some natural exhaustion may be felt towards the close. It is necessary that as much attention be devoted to the latter classes as those earlier judged, and to further this, the mind should be kept clear and not

affected by strong stimulants, such as a too free indulgence of wine or liquor. Man's nature varies, and some are able to indulge more than others. I have ever found tea or coffee most refreshing, and it enables me to perform my duties better, especially towards the close of them. I have known those who have partaken freely of wine, at the same time conscientiously endeavouring to fulfil their task, to succumb through a weakness of the flesh, and thereby carelessly perform their duties. Punctuality should be a matter of study by a judge, and it is better he be in attendance at the time summoned, or even before, than arrive at a later period. Before commencing his duties he should be furnished with a schedule of the classes he has to award prizes to, and also a book and pencil to note down the awards. On examining the birds, which should be correctly classed, possibly he may notice some of the specimens not in their proper classes. Those he will disqualify, as it is no part of a judge's duty to alter the position of any bird. Such interference may cause much trouble to a secretary when the specimens have to be returned to their respective owners. Still he may draw the secretary's attention to the error, who may be able to account for the mistake. Before a judge enters upon his duty the room or place where the show is held should be entirely cleared of all persons, unless the assistance of disinterested individuals should be required, as is the case in shows of great magnitude, for the purposes of moving or carrying cages. The secretary should be in close attendance, if required, to answer any question the judge or judges may ask. The cages containing birds for competition should not bear any labels upon them, but the numbers corresponding with those in the secretary's book. When a judge has completed his duty, he should give in the return to the secretary, but retain the book himself, in which he

had entered the award and made notes, for his own reference, if required. After the awards are given in by the judge or judges, the secretary, with the aid of an appointed official, should proceed to place or attach the prize cards to the respective cages containing the winning birds, according to the returns given in by the judge. This is often performed by a judge himself, but in the best conducted exhibitions a judge is relieved of this additional labour. When a judge has somewhat rested from his arduous duties, and the prize tickets are all affixed, he should examine all the classes and see that the cages containing winning birds bear the proper prize cards. If birds arrive after the time specified in the schedule, and the classes in which they should be entered have been judged and booked, they will be too late to be judged, and the disappointment and neglect must rest with the owners of such for not forwarding them earlier. A person, although acting in the capacity of a judge, should not be allowed the privilege of claiming any of the specimens prior to the time fixed upon for opening the exhibition to the public.

CLEAR NORWICH CANARIES.

THE breeding of these birds is promoted more than any kind of Canary. They are very compact in form and plumage, and are much prized by fanciers for their beautiful colour and blooming appearance, which show to the best advantage after the casting of the nest feathers. Although somewhat small, they are of robust make, free in song, and generally possessed of a bold voice. If well tutored, none, excepting the German songster, can surpass them for harmony. The deep colour is much encouraged by a system of feeding and artificial moulting; still, without breeding from

high-class stock, the deep colour cannot be satisfactorily attained. I have referred to the feeding and moulting process elsewhere. Foul means of artificial colouring or defacing these beautiful birds are, I regret to say, frequently practised by unprincipled exhibitors, who are often detected, much to their shame and disgrace.



There are six classes of Norwich birds, exclusive of the "Crested" and "Green" kinds. The two first on the list are termed clear yellow and clear buff. The yellow

Norwich.—This represents an entirely clear specimen.

resembles the colour of an orange; the buff is somewhat paler, although having a fine mealy tinge or bloom over the rich colour beneath. The flue of the clear bred birds is white and silky. Sometimes fine clear birds are thrown from marked or variegated birds, when the flue will often be black, especially about the vent. It is advisable, at times, to cross a clear bird with a variegated one, for the purpose of strengthening or upholding the colour, for by continually matching clear birds together, the progeny become too mealy, and lose, in a great measure, the rich buff appearance. This I know from great experience.

They are judged by the following points:—

BEAK—short and clear for choice.

HEAD—moderate size, with fulness throughout.

NECK—the fulness expanding regularly from head to chest.

BACK—straight, wide across, exhibiting power, and well filled over the spine.

WINGS—the outer edging of the flight feathers should be rich in colour; feathers very compact, even throughout, and not crossing at the tips.

TAIL—inclined to be short, but very compact and thin.

CHEST—broad and full, and gradually expanding from the neck.

BODY—towards the vent should taper off, exhibiting a slight flatness, on the under part especially.

LEGS and FEET—of a light flesh-colour or white, and the nails not twisted.

FEATHERS—of a very compact and rich kind.

COLOURS—in Jonques a very rich orange, carried as much as possible throughout the bird. The Mealys should have a considerable flowery tint, lacing, or edging, on the tips of the feathers.

TICKED OR UNEVEN-MARKED NORWICH CANARIES.

THERE are two classes, yellow and buff. Specimens, whether ticked, blotched, or irregularly marked, are better classed together. Those slightly ticked often appear as though they were clear birds, but it would be unwise to enter them with such, for it would not only be unfair to other exhibitors, but would give rise to disputes. Excepting for the marks upon them they are judged by the properties of the Clear Norwich. Birds, with more or less ticks or marks, can be shown together. A mark on either the head, body, wings, tail, or legs, constitutes a show bird.

EVEN OR BEST MARKED NORWICH CANARIES.

SOME difference of opinion having existed respecting the two classes (yellow and buff) of Norwich, termed "Marked or Variegated," and many exhibitors not being well assured or directed as to how they should be marked for show, I deem it necessary to designate them as above, viz., "Even or Best Marked." This will give not only facility for the classes being patronised, but thoroughly understood.



Norwich (even marked).—This represents a specimen marked dark around each eye ("spectacle-eye marks"), and also the smaller flight feathers dark, the rest of the bird clear, except the lower portion of the legs, which are often dark. Either light or dark legs will do for exhibition.

and the other two marks being on the lesser flight feathers, which should be marked as regular as possible. In these classes birds having six marks, viz., the eye marks or face marks, the marks on the smaller flights, and also having a dark feather on each side of the tail, will be good specimens to compete with. Birds are often bred with the marks on the wings and an oval mark on the crown of the head without any eye marks. This marking is much favoured by many fanciers throughout England, and although the birds

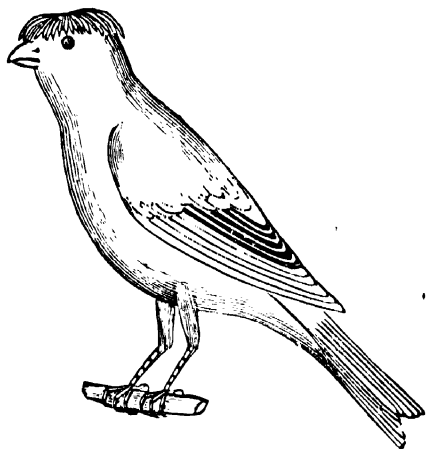
only possess three marks, still there is considerable uniformity about them, and it is a question as to whether they are not equal in beauty to others. I would, therefore, include them in the same classes as those with four or six marks. Such birds should be judged together. The points of perfection will be the same as in the Clear Norwich, so far as shape of head, neck, back, chest, body, and yellow and buff properties are concerned. Sometimes the legs will be dark, but birds with either flesh-coloured or dark legs are eligible. Birds with dusky feathers about the thighs • or near the vent, in addition, are allowed to compete.

Very heavily marked or variegated Norwich birds (one of each colour, yellow and buff) paired together will sometimes produce Green Norwich, but of a very different green colour to the Dark Green birds exhibited in the North of England, resembling more in shape the Yorkshire breed. The Green Norwich are much richer in appearance, having a fine bronze-like tinge in the plumage. These are sometimes matched with Clear Norwich to obtain Marked birds. When a bird is bred from such parents, with clear plumage, and well moulted, it will frequently have a deep blooming colour.

CRESTED NORWICH CANARIES.

EXCEPTING the crests, they very much resemble the other Norwich birds in quality and form, both in the yellow and buff kinds. Those most in favour are marked on the smaller flights or wing feathers, and also with a dark green crest falling regularly from the centre of the crown over the beak and eyes. They vary in general formation of crest from the "Copper" birds, for instead of the crest graduating into smooth feathers at the back of the head, the crest is

continued all round it, showing as little vacancy of feather or baldness as possible. There are two points for consideration in breeding good crested birds. One is, that they should not be bred too large so as to show evidence of half "Cuppy" breed, for they are likely to be disqualified at a show; the other is, that when bred too close with small crested stock, the progeny decrease in size, and appear somewhat stunted. Good bold looking



Crested Norwich.—Marked, as sketch, with dark crest, and smaller flight-feathers dark; other parts clear.

birds should always be chosen for breeding purpose, but two crested birds should not be matched together, for the offspring often turn out bald and deficient in size of crest. Generally there are four classes, which are sufficient, viz., two for the best marked crested yellow and buff, having dark crests, and lesser flight feathers dark and even; and two classes for yellow and buff of any other variety of crested Norwich, which should have dark, grizzled, or clear crests, without the marks on the wings, and also others more heavily variegated. Next to the best marked crested specimens (the head and wings), those with fine green or dark crests, with clear bodies throughout, are esteemed. The points of perfection are the same as in other Norwich birds with the markings, already described.

Gifted by —

Sri Basanti Bahadur Sen

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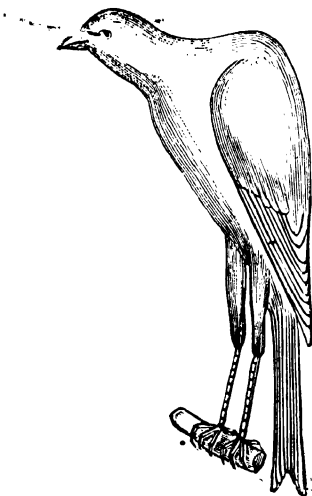
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NOT EXCHANGEABLE AND

NOT SALABLE.

CLEAR BELGIAN CANARIES.

THE Belgian bird—I mean one of recognised form—is really aristocratic in appearance compared to most other Canaries, considering its finely chiselled head, containing a pair of full piercing eyes, its raking snake-like neck, jutting out from well-formed shoulders and back, from which should lie faultlessly-shaped wings, not crossing at the tips. It should possess fine feathers and colour, a good chest, be well braced up from the chest to the vent, with a long tail, piped, and good stand to set it off to advantage.



Those most highly prized in this country are from Antwerp, Brussels, Ghent, and Dietz. The thinner and more slender specimens are termed French Belgians,

Belgian.—Clear throughout. the coarser feathered or larger birds being from Holland, are styled Dutch Belgians. Contrast the Belgian with the “perky” little plain Canary, and he looks a high-bred gentleman-bird compared to his little cousin-german; there is indeed as much difference as between the race-horse and cart-colt. After examining the latter bird, you have the impression that he is a hypocrite in his heart, he is so smirking, so soft and deprecating in all his movements, but directly your back is turned he raises his head feathers, and often pours forth a shrill, bold burst of song; turn your head, and he suddenly sub-

sides into silence. The bearing of the Belgian is just the reverse. He is a steady, well-trained, fine-looking fellow, and will return you stare for stare, refusing to retreat an inch. Generally they are not such songsters as other Canaries, being weaker, and more tremulous in voice. They are more subject to disease, especially asthma, and the average of life of shorter duration. They are bred very freely by the Belgian peasants as a pastime. The best breeders promote principally the breeding of clear birds, not thinking so much of the marked or variegated kinds, which have of later date come into fashion, through crossing with dark birds of inferior blood. At one or two of the great shows in Belgium, prizes are given for the best birds irrespective of colour (either yellow or mealy). Such birds are held in estimation, and realize large sums. Very few of these reach the English fanciers, although there are to be found breeders in this country who will at times import them, even at fabulous prices. There are two classes—yellow and buff—and they are judged for the following points of perfection—

BEAK—slender and clear.

HEAD—small and flat.

NECK—long and slender.

BACK—long and good circle.

SHOULDERS—high, and well filled between.

WINGS—long, compact, and thin, lying close to the body, but not crossing each other at the tips.

CHEST—prominent, but tapering towards the vent.

BODY—long and slender.

TAIL—long and thin, with the feathers well wrapped over each other, and inclining in circle with back.

LEGS—for length and erectness of stand.

FEATHERS—closeness, with richness of colour—not coarse

FEET—slender throughout, with nails not twisted on one side.

TICKED OR UNEVEN-MARKED BELGIAN CANARIES.

THESE two classes of birds (yellow and buff) are mostly bred from clear stock, but a slight mark, tick, or heavy blotch on any of the outer or visible feathers either on body, wings, tails, or legs, constitute show birds. They are, apart from this, judged for the best Belgian properties, by the same rules, as near as possible, as the clear Belgians.

EVEN OR BEST MARKED BELGIAN CANARIES.

THE points of excellence of these two classes of Belgian birds should resemble Clear-bred Belgians in general figure, but this is rarely attainable. In addition to the other properties, they should be marked as under:—

BEAK—slender and dark.

EYE-MARKS, or Spectacle-eyed—a narrow mark round each eye, tapering to a fine point on each side of the head, but neither coming to the front of the beak or on to the neck behind; if only marked on the cap or crown, and not about the eyes, it should be of a perfect oval shape, without the dark feathers reaching to the eyes.

WINGS—the outermost flight-feathers to be white, the inner flight-feathers dark.

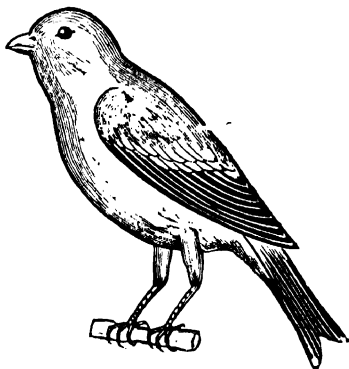
TAIL—the tail, if not clear, but regularly marked with one or two dark feathers on each side, to be considered a good show bird; specimens with entirely dark tails are eligible for show.

THE UNDER PART of the bird from beak to vent to be as clear and free from dark feathers as possible.

THE UPPER SURFACE from the marking of the crown of the head, to be entirely clear to the tail, the wings excepted. THE LEGS to be dark—the darker the better in each variety.

THE LONDON FANCY CANARIES.

THIS breed is one of the choicest known, and scarcer than any other Canary bred. Nothing can possibly surpass the beauty of these birds when clean moulted. In their first or nestling feathers, they very much resemble the "Lizard" when young; but, from long experience, I have satisfied myself that the change they undergo in their various stages of moulting is quite sufficient to establish the fact that they are a distinct breed. This opinion is fully borne out by the opinion of several breeders of the "London Fancy" birds of many



London Fancy.—Clear throughout, excepting the WHOLE of the FLIGHTS and TAIL feathers which are BLACK.

years' experience. One of these informs me he had bred and shown birds for the past fifty years, but could not give any account of the breed, otherwise than that they were always understood to be quite distinct from other kinds. Although resembling the "Lizard" in their nestling feathers, if bred with a mark on the cap, when clean moulted, the mark, however large, will disappear, but not so with the "Lizard" bird, which retains it. The breed is somewhat small, and in casting off the nest feathers, they entirely change to a

rich colour, except wings and tail, which remain black until the next moult, when the darkness in wings and tail is partly lost. Below are the correct properties obtained from a member of the "Hand-in-Hand" Society, London.

Like the "Norwich" breed, colour in the "London Fancy" is a great point, both in Jonque and Mealy. The Mealy birds should have their feathers fringed or tipped with white, and appear more bloomy than the yellow, which should be of a very deep orange, with a silky appearance of feather. The black feathers should be as bright as possible, but blackness of feather is only referred to when colour is equal in two birds. The cap is the principal point; next breast, saddle, and back. Cap, saddle, and back will surpass breast, saddle, and back; cap and breast will beat saddle and back; but breast, saddle, and back will beat cap, although that is first point. In a first-class show bird every feather in the flights and tail should be black, in stalk or web, and not have an entire white feather; each flight must contain eighteen flying feathers, and the tail twelve feathers.

First-class birds of this breed often realise very high prices, which is not to be wondered at, taking into consideration the trouble and attention devoted in bringing them out in a manner satisfactory to the breeders of them. They are judged by the following points:—

CAP—for colour, magnitude, and regularity.

COLOUR—for richness of yellow, not only in the cap, but throughout the bird.

WINGS AND TAIL—for black, home to the quill.

SIZE—for largeness and elegance of shape.

PINIONS—for magnitude and regularity.

SWALLOW-THROAT—for largeness.

FAIR BREAST—regular.

LEGS—for blackness.

FLUE—for blackness.

LIZARD CANARIES.

WHAT can be prettier than these little spangled beauties? Whether they be the rich Jonque or Golden Spangled, or the Mealy or Silver Spangled birds, there are many points to admire about each.

The deeper the colour of the Golden Spangled the better it is, especially in the cap, fringing or lacing of the spangles, and the breast. The cap should be of good size and oval in shape, extending from the dark beak to that portion of the crown behind, where it should terminate somewhat square and regular. On each side of the head the cap should reach the eye-lids, which should



Lizard.—Clear in cap. Breast, either in the Golden or Silver specimens, slightly streaked from the neck. Spangles slightly increasing in size from the face, down the back, until reaching the middle, where they are largely developed. Black wings, fringed with a little lighter shade. Tail black, fringed the same. Lower part of legs and beak black.

be dark. From the neck the spangles gradually increase in size until reaching the back, where they are fully and regularly developed. The legs, feet, and web and stalks of wings and tail, black. The head when large, wide, and flat, is much preferred. The remarks with respect to the properties likewise refer to Silver Spangled specimens, which bear a mealy or silvery appearance. The breed is much

promoted in many parts of England. Several years ago there was a class of Lizards termed "Blue Spangled," and some pretending to this colour were shown at the Crystal Palace, Sydenham, but not being quite blue enough, the class very properly came to grief. They merely presented a slaty or greyish-blue-black hue beneath the spangles and in the down or flue-feathers, which was caused by matching two mealy Lizards together. Like "London Fancy" birds, the Lizards are "out of feather," and not so eligible for show, after their first year's moulting feathers are cast, when the feathers become tipped with grey or white at the ends of the flights and tails. The better the breed the less will they show the white tips on the feathers. Unfair exhibitors at times resort to the foul doctoring process, to deceive the judges. Sometimes these birds are neither of a confirmed Golden nor Silver appearance. Such are liable to be disqualified, as also are those foul in the wing and tail feathers, or with a broken cap. The most important point is the cap, then spangled feathers, throat and breast, wings and tail, chest and body, head, neck, legs, and beak.

They are judged as follows :—

BEAK—the darker the better, and short.

HEAD—the crown should be flattish and wide, with size throughout.

CAP—should possess purity, rich colour, and magnitude of form, with great regularity, coming to the beak in front, and to the back of the crown behind, and not lower than the eyebrow or lid, which should be dark.

NECK—short and thick, with small, clear spangles beginning at the back of the cap and gradually increasing in size towards the body.

BACK AND SPANGLES—should be wide across, clearly and thickly spangled, the boldest being in the centre, and

the others gradually decreasing towards the sides and upper tail coverts.

WINGS AND TAIL—should be black, the bastard wing feathers particularly so, the others (pinions) black in stalk and web, and fringed with orange, or silvery white, according to class.

THROAT AND BREAST—orange or silvery, according to class, and regular throughout, the richer the orange the better.

CHEST AND BODY—the former wide and the body of good size, the bolder the better.

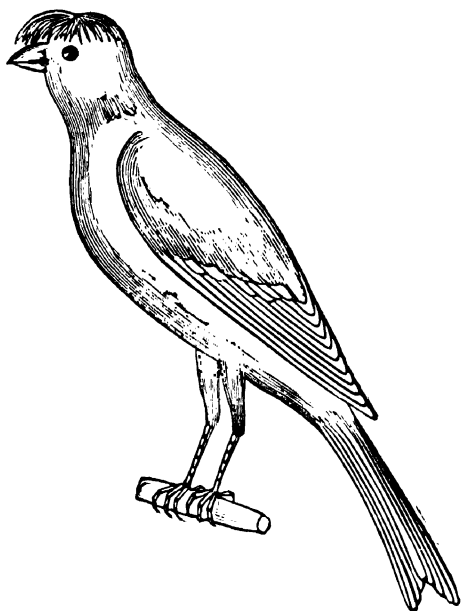
LEGS AND FEET—throughout, the blackest the best, and nails not twisted.

FEATHERS—very close, and not deficient or puffed, with the underneath flue of the golden spangled a bluish-black, and the flue of the silver spangled more of a dark grey. In the yellow portions of the golden spangled the richer the orange the better, and in the silver spangled the colour should be more like newly-cast virgin silver, especially in the cap.

MANCHESTER COPPY CANARIES.

THE “Manchester Cobby” Canary is larger than the “Belgian,” and differently shaped, being stronger in body, with a long straight back, which form should be continued to the tail end. There is considerable grace in a good specimen, bearing a noble crest, striking well from the centre of the crown over the beak and eyes, and gradually tapering off to the sides of the head near the back, where the feathers should lie close. The wings must be long, lying close to the well-formed loins, and not crossing at the ends. The crest should be clear in feather, on a head of small size, with neck and

back long. • The feathers must be close and silky, with no dark under-flue. The mealy birds are somewhat whiter in



Manchester Coppy.—Entirely clear—no dark feathers anywhere. Clear crest, which falls from the centre of the crown very heavy over the eyes and beak, but gradually tapering into smooth feathers behind and down the back of the head.

appearance than other breeds, but the yellow birds should be possessed of good colour. The crest should not be split in the front over the beak. These birds are very long, some of them being nearly seven inches from head to tail. The best of this breed I have found in Lancashire and the neighbourhood of Macclesfield. The longer the birds, and better the crests, the more they are prized. The following are the most commendable qualifications :—

BEAK—small and clear.

HEAD—flat, and not very large, having a heavy crest, quite clear, converging from the centre of the crown towards the beak and eyes very regularly, over which the feathers should project. From the sides of the skull over the eyes they should gradually taper off, and at the back part of the head become smooth. The feathers of the crest should be close and compact, with no split in the front of the crest over the beak.

NECK—long and straight.

BODY—large and straight, especially the back, which should increase in size from the neck, and taper gradually towards the tail.

CHEST—round and expanding from the neck.

WINGS—very long, lying close on the loins, and not crossing at the ends.

TAIL—long, straight, and very close, being in a line with the upper part of the body.

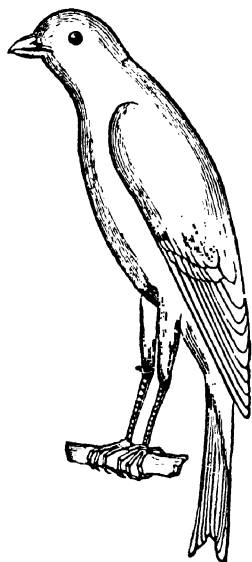
FEET AND LEGS—long and slender.

FEATHERS—close, clear, and silky in the flue, the colour of the yellow being somewhat rich, the mealy almost white.

SCOTCH FANCY CANARIES.

THIS breed, often styled the “Glasgow Don” or “Scotch Fancy,” is held in high estimation in Scotland, and the northernmost portion of England, but is not much known on the south side of Yorkshire. It is looked up to with as much favour by our Scotch brethren as the Norwich bird is by the English fancier. Besides classes for “clear” birds, there are those for “flecked” or “piebald,” as they are termed. They have small beaks, and heads beautifully round, are narrow in the shoulders, with tails long and

tapering, forming a perfect curve, like the half moon, and possessed of a peculiar action not existing in any other kind



Scotch Fancy.—Entirely clear.

of Canary. They are not often seen at exhibitions in the south of England, although they have been shown at the Crystal Palace, in a class set apart for Canaries of “any other variety.” They are judged principally for the following properties :—

BEAK—small.

HEAD—round and small.

NECK—long.

SHOULDERS—close and narrow, not high.

BACK—well filled.

FEATHERS — quality good, not coarse.

COLOUR—for richness.

LENGTH of bird.

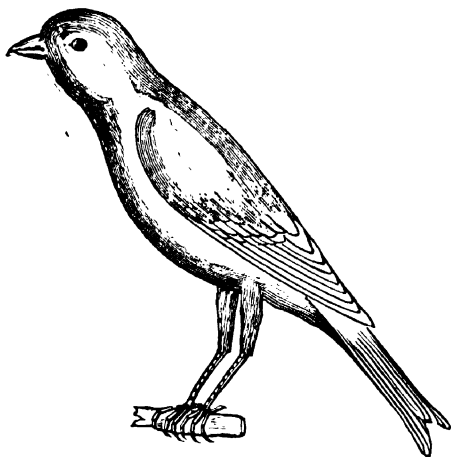
STAND—erect.

YORKSHIRE FANCY CANARIES.

In the northern part of “Merry England,” especially, the breed of Canary named “Yorkshire” finds numerous admirers. They are not so deep in colour of plumage as the Norwich, being more of a lemon yellow, although every endeavour has been made to impart a high colour. Some breeders have crossed them with Norwich stock, for the purpose of improving richness of colour, and with the Coppy bird to increase their length, but by so doing they depart

from the form peculiar to the "Yorkshire," and they have no possible chance of gaining prizes with such when properly judged.

There are two classes for clear Yorkshire, besides those for even-marked, and uneven-marked or ticked.



Yorkshire.—Entirely clear.

The even-marked birds should be nicely pencilled about the eyes (spectacle-eyed), which markings should gradually taper off towards the sides of the head, having the wings evenly marked on the smaller flight feathers. The birds should be clear in the body feathers, above and underneath, from the beak to the tail.

They are longer than Norwich birds, being straight, or nearly so, in the back, longer in neck, and rather more leggy. The chief points are:—

BEAK—slender.

HEAD—round and moderate size.

NECK—straight and long.

SHOULDERS—rather broad, but not high.

BACK—well filled in and straight.

STAND—firm, and of bold carriage.

WINGS—long, and not crossed at the ends.

LEGS—rather long.

FEET and NAILS—not coarse, or twisted awry.

FEATHERS—close and entire.

TAIL—close and straight.

CINNAMON CANARIES.

CINNAMON coloured birds have long been bred, and have been dubbed with the titles of “Quakers,” “Duns,” &c. Of late years a great improvement has taken place in their appearance. The chief aim of fanciers in the south of England is to breed them rich in colour, with the form of the much favoured Norwich birds. Those of the north country are generally longer, and partake more of the shape of Yorkshire or half-bred Belgian birds; and they are not so deep in colour. There are several classes for them, one being for Jonque or Yellow Cinnamon, one for Buff or Mealy, and another for Marked Cinnamon, and at some shows even more than these. The Jonque birds should possess a very rich coloured plumage—the richer the more prized; the Buffs are not so high coloured, but are very beautiful when well tinged with mealy bloom. The Marked Cinnamon are much in favour when evenly marked about the eyes and face, and regularly marked on the smaller flights of the wings. Cinnamon birds have different coloured eyes to most other kinds; they are of a pinky reddish hue. When hatched they may be known from other birds, owing to the appearance of the eyelids. The fancy for Cinnamon birds is now very great.

There are several other kinds, such as the German Canary,

the dark brownish green, the black green, the dark green with crests, white with grizzly crests ; also crosses betwixt the London Fancy and the Lizard, the Norwich and Fancy, Lizard and Norwich (in Derby called the "Spot or cross-bred"), the Yorkshire and Norwich, and others, most of which make good cage songsters.

Canaries will readily pair and breed with the Goldfinch, the Brown Linnet, the Greenfinch, and the Siskin and Serin.

The cross between the Canary and the Goldfinch in general produces the handsomest birds, the young partaking much of a very beautiful intermixture of both parents.

The cross between the Canary and the Siskin is much like the female Siskin, if the female bird is a Green Canary. But if this be mealy or yellow, it becomes rather brighter, and mostly retains the colours and figure of the Siskin.

The cross between the Canary and the Serin is distinguished only by its smaller size, and by its short thick beak, from the common Grey or Green Canary, unless when produced by a Mealy or Yellow hen Canary.

The cross between the Canary and the Linnet. When the descendant of a Grey Canary, its only difference is a slightly longer tail ; but it is often variegated or marked with light feathers when the Canary is yellow or mealy.

Other particulars and experience of Mule-breeding will be hereafter noted in a separate chapter.

HABITAT.—Except during the breeding season, the males, for singing purposes, are kept in small bird cages, generally of the shape of a bell, and made of wire, and must be at least one foot high, and eight inches in diameter, and furnished with two transverse perches. Other cages are often used, such as those of waggon-top shape, or slanting tops (as the fancy may incline), with the seed-drawer or fountain at one end, and a vessel for water at the other. Cages of easier

construction, made of wood, all but the front, are snug and suitable. They should be from twelve to fourteen inches



long, ten or eleven inches high, and six inches from front to back, having wire fronts, two perches, and two tins or glasses for seed and water. They can be either stained or painted any colour suitable, will answer two purposes, either for song birds or for exhibiting in ; but they are not so well adapted for suspending in front of a window as the bell-shaped cages, which are more ornamental. When many

•they can be assorted in lots in larger cages. The females can be placed together in breeding cages, or in a fly, according to circumstances. In the bell-shaped cages, wherein it must be understood only one bird should be placed, both the eating and drinking vessels must be fixed on the outside, at the extremities of the lower perch. These should be surmounted with a cap of tin, so that the bird may not scatter its food easily. Cleanliness will often prevent these delicate birds from suffering many disorders, and it is very desirable that the floor of the cage should be made moveable, that it may be more easily cleansed and strewed with coarse sand. Being inhabitants of a warm climate, and rendered delicate by constant residence in rooms, and so in a manner habituated to a temperature similar to that of their own

country, great care in winter is necessary that the same temperature be preserved, avoiding the exposure to cold air; which, however refreshing in summer, cannot be otherwise than prejudicial to them, causing sickness, and even death. To keep them in a healthy and happy frame, it is very important to observe that in summer they must be frequently hung in a cage, in brilliant daylight, and, if possible, placed in the warm sunshine, which, especially when bathing, is very agreeable to them.

FOOD.—This is a most important consideration. The more simple and true to nature the food is, the better does it agree with these birds; whereas, when too artificially compounded, it renders the birds weak and sickly. The best food for them is the summer rape-seed, scalded, which is sown in spring, distinguished from the winter rape-seed, which is sown in autumn: it is larger and blacker than the former, and is not so suitable for the stomach, being very strong. Like the Linnet, they thrive very well on this food, but it should be occasionally intermixed with some crushed hemp seed and Canary seed, for the sake of flavouring it, and this especially in the spring, when they are intended for breeding. As a treat, we may give them a mixture of summer cabbage seed, groats, whole oats, or oatmeal, with millet, flax, and Canary seed. Here, as in everything else, we should strive to imitate nature. With this simple mode of treatment I have reared numerous Canaries, and kept them healthy for many years; whereas others, who have attended theirs with the greatest labour and care, have incessantly complained of all kinds of vexatious and unfortunate casualties. Besides a multitude of short essays upon the mode of treating Canaries, lengthy volumes have also been written upon it. These contain a variety of very artificial modes of treatment, all of which effect no more than what the few simple ones here described will do. The hens likewise are supplied with this food; but

In winter they are contented with roll or merely barley groats, moistened in milk, if given to them fresh every day, to keep it from becoming sour. Besides, both males and females have given them in summer some dandelion, ripe plantain seed, salad, groundsel, and water-cresses, which must be previously washed and cleansed from anything prejudicial, and in winter occasionally fed with pieces of sweet apple.

They require fresh water daily both for drinking and bathing, and at moulting time a rusty nail should be occasionally placed in their drinking vessel, as this tends to strengthen the stomach.

They pick up the little angular grains of sand with which the bottom of the cage may be strewed, and which very much assists their digestion.

* These kinds of food are for the full-grown bird; the young require different treatment, at least as long as they require the care of their parent birds, and are being moulted.

BREEDING.—The rearing of these birds is accompanied with many difficulties, rendered still more so by reason of the innumerable artificial means that are resorted to.

A bird is known to be old by the prominent scales of its legs, and by its strong and long claws. Good breeders are rare and costly. Some males are always dejected, sing but little, are indifferent to their mates, and consequently unfitted for breeding; others are too choleric, incessantly snap at and hunt the females about, and indeed often kill them and their young; others, again, are too ardent, persecute the female while she is hatching, tear the nest, throw out the eggs, or continually excite the female to pair, until she quits the eggs or neglects the young.

The females have also their defects. Some merely lay, and immediately quit their eggs as soon as laid; others feed their young badly, maim them, or pluck out all their feathers; others lay with much exertion and labour, and when they

should hatch become sickly, or lay each egg after a long interval.

To correct all these defects of character and temperament in both sexes, certain remedies are said to be efficacious ; but they are almost all deceptive, and the fancier, notwithstanding his attention to them, is often exposed to many disappointments. The best plan, however, is to remove the birds having these faults, and substitute others which are without them.

Hens vary much in temperament ; some are very restless, timid, and bad sitters ; others will permit all possible freedom during the period of incubation and bringing up their young. During the early part of the breeding season you become acquainted with the temper of your hens, and know better how to treat them. Some treatises will say do so-and-so, but still the directions may not be of advantage respecting some hens. I say the best guide is experience ; for the ground-work, and general knowledge how to proceed, of course they are useful. You may, perhaps, be breeding with one or two to twenty pairs, and upwards, and matters may run smoothly on as regards eggs in nests, hens sitting, others chipped or near chipping, and some of a week or more days' old, or about leaving their nests. I have known many such instances of disappointment and misfortune to occur, and all through a little too much meddling with them before they are safely out of their nests. Even when they are out of their nests, they require all care, for fright and want of caution will at times cause young birds to dart wildly about the cages until either wings or legs are broken.

To obtain birds of a brilliant plumage, it is requisite to pair together such birds as are of similar markings, and whose colours are distinct and regular. This is best effected in separate breeding-cages. Variegated and checkered ones are often produced in aviaries, where the birds pair together.

indiscriminately. Birds of a greenish and brownish colour matched with bright yellow ones often produce beautiful dusky



white or other favourite colours. A requisite precaution to be observed is, that a tufted and a smooth headed bird should be paired, for if two crested birds be placed together they often produce the young with a part of the head bald or otherwise deformed.

Towards the middle of April is the best time to place the birds in the breeding cages or partitions. Breeding places can be constructed in various ways. Some breeders use spacious cages. Supposing you have the advantage of a corner or inlet in a room of between three or four feet in breadth, six, eight, or ten breeding places can be made by putting up shelves against which moveable fronts may be fitted either to button or screw on. Each breeding compartment should be at least 20 inches long and 18 inches high. Between two of such places there should be a wooden

slide, in which, for convenience, make a small aperture, either to be opened or kept closed at times when breeding with two hens and one male, or when you wish to throw the two partitions into one to afford more room and a better fly for several birds after the breeding season is over. Do not think I wish to encourage the breeding of two hens with one male, for I have ever found, as a rule, that more advantage is gained when breeding with birds in pairs.

If you wish to construct your own breeding places, use for the shelves deal wood, three-quarters of an inch thick, which, when well planed, will be sufficiently strong, and will not bend. The fronts of the cages are better made of half-inch pine, which is lighter and easier to work up. It does not require a vast amount of architectural skill to enable one, if so inclined, to make his own cages. I have generally found that where there is a natural taste for bird-breeding, one soon becomes acquainted with the necessary ideas to meet all requirements. In wiring your cages or fronts, use No. 16 or 17 tinned or galvanised wire instead of iron wire (which soon becomes shabby), for the former freshens up when the places are taken down to be washed, which requires to be done when breeding is over, and before placing or keeping your birds in during the following autumn and winter. I always have my breeding places well cleansed, twice each year, with the strong soap-suds from the household washing-tub, to free them from insects and dirty accumulation. Before taking to pieces, give them a dressing of camphor dissolved in spirits of wine, mixing it with turpentine and oil. This immediately destroys the red bug or vermin, and in a great measure prevents them from escaping. The two upright wires, where the sliding partition enters, should be of stronger wire, say No. 11 or 12. The reason I advise pine wood for the fronts is, that it is not so liable to split when boring the holes for wiring. Before making the

holes, gauge off with rule and pencil to a nicety, the space from wire to wire being about five-eighths of an inch. If much narrower a bird may possibly get its head fast, and the loss will be great if a valuable one. They can easily get their heads through a space of five-eighths of an inch without fear of accident. This is also a good distance for show cages.

For wiring purposes you require two brad-awls, two pairs of pliers, the ends or noses of one pair to be round for turning the ends of the wire for door-places, &c.; also have a pair of wire-cutters. I am not only my own wire-worker and joiner, but perform my own plumbing, staining, and painting. If I require tin vessels made, I purchase sheets of tin. For staining I generally use sienna, pounding it well in a mortar before using. It makes a nice lively colour. Lay it on with a brush or piece of sponge. When dry, give it a dressing of liquid size, and you will save much varnish thereby. Mind and procure good varnish, or it will take long to dry. Some breeders prefer paint. Dark blue looks very nice, but do not let your wood become greasy prior to painting. I prefer soldering the upright wires to the cross-bars of wire, rather than wrapping them with fine wire, not only because the work looks neater and is much stronger, but, it prevents harbours and crevices for the diminutive vermin which should be kept in check as much as possible; it also prevents birds getting their claws or feet fast in the wire. I also make my own solder, by melting soft lead and powder into bars. Use resin or spirits of salt for soldering with, but when using the latter take care to rub off all superfluous spirits, or the wire will become tarnished. When you have done with the spirits of salt, do not put it away with any tools, or they will become very rusty. When you purchase spirits of salt, put a portion of zinc in to kill the spirit, or you will not be able to work it. Before you

can solder you will require a soldering-iron. If your iron does not work easy, and the solder fails to adhere to the face of it, you must heat your iron just sufficient to melt solder, and after slightly filing up the face of the iron, rub it on a piece of sheet tin with a little solder and resin. You will then obtain a face to the iron by the solder adhering to it. It is through making the iron too hot that it loses the face. To the uninitiated this information will be of much service, should they require to build or construct their own cages or breeding-places. My experience has been obtained with much trouble and expense. Others interested in the cause are welcome to it.

If you have not the advantage of a corner in a room for making the partitions or breeding places, use upright boards for the sides of the sets of breeding partitions you may construct elsewhere. You will have no occasion to put a back to them if you have a good wall to place them against. It will not only save wood, but harbour fewer insects. Some prefer breeding in open rooms. I have known great success this way, but it can only be done where one breed of birds is put up. If you have more than one breed no dependence can be relied upon for purity of young stock.

Breeding places must enjoy the warmth and light of the sun, and be supplied with nest boxes, or little wicker baskets (two for each pair). If breeding in a room, there ought to be placed some dwarf pines, which, being cut down in February, will not readily lose their leaves. A wire inclosure should be made, and placed before the window, so that the birds may enjoy the fresh air. It will greatly contribute to make the young ones strong and healthy.

Those birds which are to be paired for the first time should be placed together in a small cage for a week or ten days, to accustom them to each other. If you wish two females to be paired with one male, the females must previously be ac-

customed to each other's society, by being kept in a small cage. As I have previously remarked, the breeding cage should have two compartments, separated by a board, in which a sliding door has been made. In the one compartment a lively male is enclosed with a female. When she has laid her eggs the sliding door is moved, and the male is admitted to the other female, or if they should happen to commence building at the same time turn the male in to each occasionally. When they have both laid, the sliding door may be kept open: the male will then visit both females alternately, and possibly they will not trouble themselves about each other more than an occasional sparring while defending their own nests; otherwise, without this precaution, jealousy would incite them to destroy each other's nests and throw out the eggs. In a room or aviary a male has sometimes two or even three females placed beside him; with one of these the male will more especially pair. But when this favourite is about to sit, the others will receive a share of his attention.

If an apartment thus appropriated be supplied with fine ground moss, it is scarcely necessary to furnish them with any other materials for their nests. But they may also have given them cow and deer hair, and hogs' bristles, dry and delicate hay, pieces of cotton not quite a finger's length, and paper shavings. The coarser material they use for the external structure, and the finer for lining the inside. They will sometimes show indications of their instinct by building nests after their own fashion, generally being irregular in figure and not nicely finished, at least externally.

The female, as in the majority of birds, is usually the architect, the male only selecting its place and procuring the materials. When the pairing takes place, the female attracts the male by a continuous piping note, repeated more quickly the nearer she is to laying. An interval of

seven or eight days, sometimes longer, elapses between the pairing and laying the first egg. Every day afterwards, nearly at the same hour, an egg is laid, their number varying from two to six. After laying is ended, the pairing is continued during the time of incubation.

When the hens are good breeders, and do not commence sitting from the laying of the first egg, it is superfluous to attempt to assist nature by artificial means, and it is best to leave the birds entirely to themselves. In other cases it is customary to remove the first egg, and replace it by an ivory or wood one, placing it in a box filled with clean dry sand or bran, and so taking away the eggs till the fourth is laid; all are then returned to the nest to be hatched. They lay three or four times a-year, from April to August, and some are so assiduous in pairing, that even moulting does not interrupt them. The eggs are often sea green, marked at one of the ends with reddish brown or violet spots or streaks. Still some differ from others in colour and shape, and are lighter and bluish, without any spots. The eggs of the Belgian birds may generally be known by their more delicate shape, being not quite so bulky as others. The period of incubation lasts thirteen days. If from the sickness of the male or of the female any of the eggs are unimpregnated, they must be taken out of the nest when the hen has sat for six or eight days, held lightly between the fingers in the sunshine or in a bright light; the good ones will then appear dull and filled with veins, while the bad will either appear quite clear or addled; these latter must be thrown away. The male rarely relieves the female in hatching, nor does she very willingly permit it. Immediately after feeding she returns to the eggs, and if the male should not immediately leave the nest, he will be speedily compelled by pecks and blows. The young are killed in the egg occasionally through loud and near noises, such as thunder, the firing of a

fowling-piece, slamming of doors, and any other loud knocking; but perhaps the most frequent cause of failure is through a bad sitter, and being troubled with the vermin.

As soon as the young are hatched, the old birds should be supplied with one-fourth of hard-boiled egg, pressed through a wire sieve, with stale plain bun, which is prepared more readily than mincing with a knife if required for several, some using with the egg roll steeped in water, and this pressed out again; and, in another vessel, some rapeseed which has been boiled, and has been re-washed in fresh water to take away its acidity. It is requisite to take care that this soft food does not become sour, otherwise it will kill the young, and the cause is often not suspected. Some persons give them merely their usual food, intermixing it with some finely-powdered biscuit and hard boiled egg, but I have always found the diet above prescribed more efficacious, especially until the young are fledged.

It is now that the male takes the chief part in rearing the young, and upon him devolves the duty of feeding them, to allow the female to recover from the exhaustion of incubation.

There are various points to be observed and to contend with during the breeding and incubation of the eggs. By meddling too much with the nests or eggs, or allowing many strangers to examine or pry about your birds during nesting, restless hens will often forsake their nests and young. Some hens neglect their eggs just before clipping should begin; others sit only the bare thirteen days. Many will, if you permit, sit twice that time; but it is unwise to allow them, unless circumstances require you to save some particular eggs. Some hens have been proved famous mothers in this respect, but the double sitting produces weakness, especially if they are not well kept up, and there is not free ventilation. A vitiated atmosphere will encourage a fretfulness

and uneasiness in hens, and where this is attended with a want of due care in providing clean nests and vermin harbouring in the stale ones, how can it be wondered at that matters do not run smooth? Of course, when mishaps occur, they are generally attributed to the birds. Such, however, is not always the case. That some birds will be guilty of acts of mischief and barbarity, even with the best of attention and care, is true enough. It is so in all creation. When this does happen, and is clearly traced, it is better they be got rid of. But it does not follow that because a bird, or pair of birds, have not done well over one nest, that they should act similarly over others. I have known several instances of young birds having had their beaks, ends of wings, and feet, pecked and destroyed by the parents a day or two after they have been chipped. Cases of this kind are difficult to treat. I have frequently been called upon for my advice and assistance in the matter. In some, I have found on entering a breeder's room, the air to be so oppressive as to feel an uneasiness even concerning oneself, and further, on examining the nests, have discovered the red-mites infesting them, often in perfect clusters. If a hen becomes weakened with the thirteen days' sitting, and nearly all that time has been annoyed or troubled, especially during the nights, with the vermin-pests, and she burys or disposes of an egg or so, and sometimes uproots one or two to an upmost corner of the nest, how is it to be wondered at if, when the young are just chipped, the hen vents her uneasiness on her offspring by pecking at them? This, once begun, is continued to the total maiming or disfigurement of the young. Sometimes the male birds will commit such acts. There are instances where the male birds are guilty of these diabolical deeds of maiming through an unnatural disposition, for I have seen them lift them out of the nests with their beaks, and drop them to the bottom

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of the cage, and there continue to peck at them. I have seen the male parent even attack birds after they have left their nests at the age of eighteen or twenty days old, and completely scalp them. When they are found thus savage to their offspring, they (the males) are better removed from the cage. I have known the parent bird, the hen in particular, bring up the young, even after the early maiming of them, but only when the young have been placed in clean nests free from vermin. This convinces me that the annoyance and worrying by the red-mites has often been the cause of mischief.

When a dirty nest is removed, it should be burnt. In cases of severe maiming, the young are better destroyed, for they will only be cripples. In supplying a clean nest, let it be a *fac simile* of the one the hen had made. A day previous to chipping, especially in June or July, I change the eggs to a clean nest, but before so doing, adopt my usual practice of moistening them, by dipping them in water blood warm. This practice is very essential in the earlier part of the breeding season, for it materially assists in freeing the young from the egg-shell. Clean nests are more necessary in June and July, for the red-mites are then more troublesome. When the young are about ten days old, supply another clean nest. Never mind a little trouble—in fact, you cannot well succeed without it. To prevent, in a great measure, the hen plucking the young birds to line her next nest, supply her with a fresh nest when the young are fourteen days old. Remove the nest containing the young on to another hook or nail, and hang the new nest-box or basket in its place. The cock-bird will readily attend to the young when so removed. Most hens prefer building in the old position. If this is not done, and you place in a cage a fresh box or basket, and supply the hen with building material, they will very

often begin to build on the young birds. This plan will save many young birds from being disfigured. It is so essential that birds, required for moulting for exhibition, should not be plucked by the parents. If so plucked they are not so rich in plumage as when treated in the moulting process.

An observant and systematic bird-breeder—when breeding with several pairs—will keep a book, in which he will state the respective kinds of birds he may put up to breed. He will note and number each pair in the book, mark the cages or partitions with corresponding numbers, write down what dates such and such hens began sitting, when the time of incubation is up, the number of eggs set, and also the number of birds chipped or reared from the nests. This will guide him much in sorting out his birds for moulting, which is of consequence to the breeder who moults for exhibition purposes. Memory is apt to fail one at times.

Male birds are often very mischievous to their young, by plucking or drawing out their tail feathers soon after they have left the nest. When this occurs, place the young birds in a small wire cage apart from the parents, and hang it on to the front of the breeding partition, supplying the old birds, as usual, with food. Place the cage so close that the young, when they fret or cry to be fed, can receive food from the old ones through the wires, which should be opened a little. Gradually tempt and learn the young to feed, by placing bits of soft food on the cage. When they can do this, take them away altogether.

If it is necessary to feed the young by hand, grated roll or pounded dried biscuit is taken, and mixed with pounded rape-seed, and this food is kept in a box. As often as it is necessary to feed them, a little of it is moistened with some yolk of egg and water, and given them from a quill.

This must be done ten or twelve times a-day; about four quills full is the portion necessary for each meal.

Until the twelfth day the young remain almost naked, and require to be covered by the female. It will also sometimes happen, especially in cold dry years, that the birds scarcely get any plumage. An experiment of Mad. . . . proves that a tepid bath accelerates their growth. This lady has also facilitated the disclosure of the young from the shell when too hard for the young to break through themselves, by means of warm water. This beautiful experiment may be profitably applied to the eggs of other birds. It is also well known that in warm moist weather young birds will free themselves from the shells much easier than when a dry atmosphere prevails. When a month old, the young may be removed from the breeding cage. With the usual food of the old birds they must still be fed for some weeks upon the above kinds, for the sudden removal of soft food often occasions death. Gradually get them on to feeding upon Canary seed before you discontinue soft food. It is asserted, and not without reason, that those Canaries which are reared in an arbour, where they have space to fly about within an enclosure of wire, are longer-lived and stronger than those which are reared in a chamber.

A curious and important observation which has frequently been made, namely, when there are two females with one male in a cage, and one dies, the other will hatch the eggs laid by her co-mate, and rear the young as her own, and, during this foster-mother's care, cautiously avoid the caresses of her mate.

Young birds sometimes leave the nests with the hind claw deformed from having been brought towards the front. When this is perceived, loop the hind claw to the shank with a piece of worsted or soft cotton, not too tight, or it

will be contracted. Broken shanks can often be cured by using two splinters up each side, binding it with soft cotton. Small splinters made out of quills are good for the purpose, for being hollow they are more adaptable to the shape of the leg.

It is not unusual for birds kept for singing purposes to be seized with fits when reached down to be cleaned or examined. This generally arises from their being hung high up on the walls, where there is a fire or gas used. Gas, especially, is most injurious and weakening. Birds kept in this way often cast their feathers, and fall off in their song. There is no wonder at this happening. Fancy oneself having to contend with a vitiated or exhausted atmosphere. It is frequently remarked by those who elevate themselves by standing or getting on to a chair 'how oppressive it is to the breathing organ near the ceiling. In this close and poisonous air the poor birds have to live, and there is no wonder that the system should become affected, and the loss of feathers take place. They should be hung or suspended face high, where the air is purest. They then enjoy better health, become more familiar, and do not suffer so much from the weakness which causes the fits. When thus seized, a plunge in a cold bath will often tend to restore them. Birds are more healthy and stronger in feather when kept apart from artificial heat, where no fire is kept. Fresh water daily, and a free use of it to bathe in, is an advantage to them.

To the fancier or breeder of first-class stock, who is desirous of exhibiting birds for honours, the washing process is most essential. Birds are, independent of breed and other qualifications, expected to be placed before the notice of a judge in all possible beauty and condition of plumage. Many fine birds have been kept in the rear rank owing to the smoky or dirty state they have been in

when exhibited. Whatever bloom they may be possessed of is partly hidden by the dirt and smoke, and were unclean birds encouraged before cleanly-looking specimens, an inducement would be offered to filth, and exhibitions would degenerate. In performing the operation of washing, much care must be exercised. You will require a cage for drying in before the fire, with a soft cloth placed on the bottom inside the cage, a shaving brush (the one I use for the washing operation is made of badger-hair, being soft and easy), a fine soft drying cloth for extracting as much damp as possible out of the feathers before placing them in the drying cage, and two bowls for washing the birds in. When you lay hold of a bird to wash it, handle it firmly, but carefully. Hold the bird in the left hand, with the head towards the wrist, the tail falling over the forefinger. When washing, do not press the thumb tight across its neck, for, by so doing, the neck feathers may possibly become frilled. Then, after rubbing the brush upon the soap, apply it to the back of the bird, washing the back and wings down to the tail. Having freely performed in this manner, turn the bird on its back, and in a similar manner clean the breast and underneath portion. Operate on the head and neck, and when you find the dirt well extracted, rinse in clean warm water, or the feathers will not be in proper condition when the bird is dry. Do not be afraid of soap getting into the eyes or mouth, but, of course, be as careful as possible in this respect. The birds will become somewhat prostrate, and appear to an unpractised person as though they were dying, but it is not often such accidents happen. One advantage is to get through the operation as speedily as possible, keeping the birds warm the whole of the time. Do not have the water beyond blood-heat for fear of injuring them, and, previous to washing, place in each bowl a small piece of soda, which assists

in getting the dirt well out of the feathers. It will occupy about six or eight minutes to wash each bird, and from twenty minutes to half-an-hour drying. Have a good fire to dry with, but be careful not to place the birds too near for fear of burning them. When one is washed, and placed in the drying cage, proceed to operate upon another, and as you find the first washed dry place them in another cage. This will prevent one while drying from soiling the others, and will afford more room in the drying cage for the remainder. One drying-cage will be sufficient for a dozen or upwards to dry in. Birds kept in the country away from the smoke of a town, very rarely require so much cleansing, but keep them how you may in a neighbourhood where there is much smoke, you cannot even, with close covering up, prevent birds becoming soiled and dirty in plumage.

When the tail or wing-feathers are broken, pluck out the stumps. It will take from five to six weeks for the full growth of new feathers. It is necessary that all birds should be exhibited in as perfect a state of plumage as possible. Avoid as much as possible damaging the wings and tail feathers of London Fancy and Lizards, for with them the growth of new feathers become more grey. When the ends of the flight or tail feathers become curled, they can easily be straightened by dipping in hot water and stroked through the thumb and finger.

A great drawback to successful bird-breeding before the early part of April, is the loss of hens that frequently occurs, and the unsatisfactory number of eggs laid, often but one, two, or three, and those most likely unfertile; whereas by delaying until a more genial and propitious season sets in, you have a better chance of success, save the lives of your hens, and have a full complement of eggs. This climate is so variable, that you should not be tempted by

early sunshine, or risk having to contend with frosty nights. Many exceptions to ill-luck may happen where birds have the advantage of artificial heat, and are bred in a room over one where a fire or gas has been kept burning during the day and part of the night. In such instances the birds derive a certain benefit, but I do not advise either a fire to be kept, or gaslight (which is very injurious), to be used in the same room, for the express purpose of forwarding your birds. I know some writers have advocated heat from gas as a means of promoting success. I know many cases of the ill-effects caused through the use of it. The case of one breeder in particular I will mention. He had gas fixed, and burnt it in a stove every night during March and April. The birds were forwarded very much, laid several eggs, and reared a fine young brood, but in early May his breeding birds began to cast feathers and moult, and an end was put to his further success. Several of his birds became very weakly, and died in consequence, at the very time when they ought to have been doing best. I advise matters taking more of their natural course, and would urge breeders not to be too hasty in sending hens to nest, for in early spring, especially, very cold north or north-east winds prevail, and they are very pernicious, not only to man and beasts, but to Canaries also, and there is less chance of the young chipping so well as when a warmer or more humid climate sets in. Very often in the early part of April unfavourable weather for hens laying will prevail, and the distressing complaint of inflammation or egg-bound will occur. When hens are breeding they will mostly, towards the laying of their eggs, appear dull. Some may be more robust than others, and pass through their difficulties easier; not so with some which, especially the day prior to laying, appear much affected, and towards mid-day, or the afternoon, become completely prostrate, and are not

able to reach the perches, or even the nest basket or box to deposit their eggs. It is an old-fashioned custom, I know, for breeders to fix their nesting-places high up in some remote corner. I do not approve of this. They do better when not so high. The hens when somewhat ill and affected make attempts to reach their nests, and would often succeed were they fixed lower in the cage. When a hen has strength to reach its nest do not interfere with it, and no doubt you will find the morning's present, and the hen bearing all the signs of health. If the night be cold and dry, and great prostration ensues, with no chance of her reaching the nest, then you run the risk of losing her, and she would be better taken out, placed in a small cage with some moss at the bottom, and kept in a room where there is warmth, with a little oil applied to the vent, and replaced in the breeding-cage very early the next morning. Again, if prostration should be so great, showing evident signs of approaching death (which is very speedy at times, for I have found various degrees of prostration), then administer one or two drops of castor-oil, and let the hen have a warm bath (be particular the water is not too warm), by holding the underneath part of the bird for five or more minutes in the water. After this anoint the vent with either a little oil or lard, and then lay it on the moss in the cage before the fire. You will afford relief to the hen thereby, and most likely save its life. The cause of this prostration is a want of proper action through the ungenial weather, which causes an excitement or inflammation to the womb or egg receptacle. Young hens are more liable than those of more mature age. When you find a hen you expected to lay in the morning in a corner on the bottom of the cage, to all appearance lifeless, that poor sufferer requires immediate assistance. Apply the oil inwardly and outwardly as directed, and let it have the warm water

or a vapour-bath. Both are good, but I prefer the former, which moistens them more effectually, and keeps up a dewy moisture longer whilst they are in the small cage before the fire; whereas the vapour-bath suffices only for a time, and the skin of the bird sooner becomes dry when before the fire. It is essential that both heat and moisture should be brought into play. After the above treatment, the hen will no doubt soon part with the egg. Do not break an egg inwards, for they can be better delivered whole. I have saved the lives of many hens with the above treatment. Sometimes young hens will rupture themselves by forcing the womb completely out. If you cannot, after the aid of the warm-bath, gently replace it, destroy the hen, which will be more humane than allowing her to continue in agony until death, which assuredly will take place.

Canaries may also be paired with other birds which have a natural affinity to them. The best adapted for this purpose, as we have above seen, are the Linnet, the Lesser Redpole, the Goldfinch, the Siskin, the Serin, and the Citril. But successful experiments have also been made with the Greenfinch and the Bullfinch. It has been stated that Sparrows, Chaffinches, and Yellow Buntings, have been paired with Canaries; but from their marked differences it must be a very difficult matter. Dr. Jassay, of Frankfort-on-the-Maine, has stated that he has reared hybrids between the male Bullfinch and the female Canary, but which were hatched and fed by other Canaries; and that in Bohemia many of these hybrids are reared. "My Bullfinch," he says, "is so social, that as soon as removed from his companion he cries incessantly, and will not agree with any other bird."

Either of these birds are reared for the purpose of being removed very young from the nest, in which case, as regards pairing, the difference of species is of no consideration; ■

tamed adult male bird is most frequently associated with a hen Canary. The young combine the plumage of the parents. The hybrids produced from Linnets, Goldfinches, and Siskins, will learn to sing well, but those with the Red-pole very indifferently.

When the young birds can eat alone, the males commence warbling, and the females also, but less connectedly, and from this the sexes may be distinguished. Practised breeders can mostly tell the males from the females before leaving their nests from the bold appearance of them, and the more blooming nature of the maiden plumage. To teach a young bird to pipe, he must now be separated from his comrades, and also from other birds, and placed in a small wire cage, which must, at the commencement, be covered with linen, and subsequently, by degrees, with thicker woollen cloth, and then a short air or other musical piece must be whistled to him, or a flute or small organ may be used. His lessons should be repeated five or six times a-day, especially in the evenings and mornings, and in five or six months he will be able to acquire the air, according to the power of his memory.

Canaries may be accustomed to fly, but the trouble and risk are so great, that it is hardly worth the time and care necessary to teach them. The male is first allowed its liberty in a place where there are trees, and the female is hung at the window, which speedily attracts the male back to the cage. This teaching must be continued for five or six days, but no handling or violent attempts to take it should be used.

But in autumn, previous to the migratory period, they must not be allowed to go free, as they are apt to stray with the Linnets, with which they associate when at liberty.

MALADIES.—These domesticated birds, rarely or never

enjoying the open air, and having little exercise, are subjected to the following maladies:—

1. *Rupture*.—This is a common malady, especially in young birds, and is a kind of indigestion which causes inflammation of the intestines. The symptoms of this malady are a lean, transparent, blown-up body, full of small red veins, and in which all the intestines seem to have fallen to the lower part of the body, and seem black and tangled. Too much nutritious food is the cause of this evil. All remedies seem ineffective against this malady, but assistance is sometimes obtained from a spare and simple diet, with some alum or salt put into the drink, and the aid of the warm bath, and administering one drop of brandy to two drops of water.

2. *The Yellow Gall in the head and eyes* may be cured by refreshing food; but if there be a tubercle of the size of a hemp seed, it must be cut off, and the wound must be anointed with fresh butter.

3. *Sweating*.—Some females whilst hatching have the sweating sickness, which is injurious to the brood, and may be detected by the feathers of the lower part of the body being quite wet. The body of the bird should be washed with salt and water, and the entire body with fresh spring water to wash off the salt, and be dried rapidly before a gentle heat. This is repeated once or twice a-day. This sickness, however, is not so prejudicial as is usually considered. •

4. *Sneezing*, occasioned by a stoppage of the nostrils, may be removed by a very small feather being passed through them.

5. *Loss of Voice*.—If the male, after moulting, lose his voice, he must have diet similar to that given to young birds. Some persons give them a bit of bacon to peck at.

6. *Constipation* is cured by giving them plenty of green food, such as water-cresses, salad, &c.

7. *Epilepsy or Fainting Fits* are commonly brought on by too great a delicacy of treatment, and also by timidity. They ought to be kept free from alarm, either by catching or tormenting them in any way. Feeding and indulging them freely with sweet pampering food and keeping them too warm and in an impure atmosphere, tends very much to weaken the birds, and will often bring on fits. A cold bath is often of great service in restoring them.

8. *Overgrown Claws or Beaks* require to be pared with a sharp pen-knife or scissors. Care must be taken, however, not to cut the claws too close, else the birds may lose too much blood, and become lame. The end of the red ray or vein, both in the beak and claws, when held against the light, shows exactly how far they may be cut. During hatching, also, the nails of the female must be sometimes cut, that they may not be caught by them when in the nest.

9. *Lice* are sometimes a cause of annoyance to them, especially when not kept clean. These lice are in the first stage of growth of a grey colour, but become the colour of a diminutive red bug after sucking the blood of birds. They quickly accumulate in the nests, which should be destroyed and fresh ones given. Frequent bathing, cleanliness in the cage, and dry sand, mixed with bruised aniseed, scattered upon the floor, are remedies against these enemies.

If used in breeding, the age of a Canary scarcely extends longer than from seven to ten years; in other circumstances, when carefully attended to, they may be preserved for eighteen or twenty years.

COMMENDATORY QUALITIES.—These birds have always been agreeable to the fancier from their beautiful plumage, elegant shape, singular capacity, and attractive familiarity, no less than by the charms of their melodious song. Besides, an admirable opportunity is presented of observing the differences of character and temperament which exist in these as

in others of their species. We find some melancholy, others cheerful; some angry, others peaceful; some intelligent, others dull; some industrious, others idle; some greedy, others frugal. But they have chiefly made themselves beloved by their animated, powerful, and varying song, which lasts almost throughout the whole year (with some even during moulting time). Those are highly prized that sing at night, when candles are lighted, but few birds can be taught this habit. Those birds which intermix in their melodies several strophes of the song of the Nightingale are considered the finest singers. They are called Tyrolese Canaries, as it is said they originated in the Tyrol, where many birds of this kind are reared. After these follow the English singers, which imitate the song of the Lark. In Thuringia the best singers are those which can descend through an octave, in a clear silvery tone, occasionally introducing a loud burst, like a trumpet. In breeding time, some of the males sing so incessantly and powerfully, that they rupture the small vessels of the lungs, and suddenly drop down dead in the midst of their song.

In the spring, as soon as the breeding instinct is excited by the eager calls of the male, the female emits some solitary, broken, and inharmonious notes; and old ones, past breeding, often do so throughout the whole year.

These birds are also distinguished by their correctness of ear, the remarkable skill they possess of imitating all tones, and their excellent memory. It is very delightful to hear them when they have learnt the song of the Nightingale.. Not only do they imitate the notes of other birds, and by mixing them with their own greatly improve them (hence originates the extraordinary variety of their song), but they will even learn to utter short words with some degree of correctness.

When you wish to possess and retain a good songster, it

would be as well to observe the following rules," which, from experience, I have found to be useful. In order that the bird should acquire a good style of singing, his education and training ought to begin when he leaves the nest, carefully secluding him from all birds but the one whose song it is wished that he should acquire. The same course must be adopted during his first and second moulting; after that time, as he must, as it were, relearn his song, he but too easily intermixes with it anything that he may just have heard, and of which he was entirely ignorant the preceding year. Here also one bird is distinguished beyond another in its capacity. Care also must be taken to observe whether the bird prefers solitude or the society of its comrades. Many birds will continue silent for years unless kept by themselves; others, on the contrary, will only sing loudly when excited by the presence of other birds. It is an important matter to attend to their food, so that each bird may have its simple allowance for the day given to it each morning; they will then enjoy good health, and sing vigorously and cheerfully.

Fatal epidemics in birds will sometimes occur—old and young alike falling victims to the scourge. This fatality may be encouraged by keeping too many birds within a given space, when, what with the disease and that continued tormentor—

"The blood-sucking red-mite,
Ever on the hunt at night—

the birds become weak through loss of blood and rest, being in a poorer condition on account of approaching the moulting period, when the scourge generally takes place. It is necessary that every precaution be taken that the young stock, especially, are well and cleanly cared for, as regards pure water, grit-sand, and good sound seed. One most important matter is that the Canary seed, which should be

sound and bright, be sifted and well picked before it is given to the birds. Free use of soft food, and unripe green food have a tendency to cause swelling. When once my young birds have got on to Canary seed, I discontinue egg. Cold draughts of air will often affect them, and bring on inflammation and swelling. When they become affected very often a drop or two of weak brandy and water will be of great service; also a drop of castor-oil and the bread and milk diet, and a change to a warmer situation will tend to their recovery. When frequent mortality occurs, you may then fear some fatal disease has set in. Have the survivors all washed and removed to another room, and the cages and partitions thoroughly cleansed, the walls lime-washed, and the places disinfected with chloride of lime. As a general diet, at this period, give groats, Canary seed, crushed plain biscuit, and flax-seed, but no hemp or rape-seed. Occasionally soak a little stale bread in cold water, and when well squeezed add a few drops of cod-liver oil, supplying a piece to each the size of a small nut. I have known more than one hundred birds, old and young, swept off in a short time by the Canary epidemic. It causes sad havoc to those who may experience its dire effects; and there is nothing like taking active measures to endeavour to check its progress. Very often seed becoming impregnated with the dirt of mice will bring on much illness, and cause many deaths.

ARTIFICIAL COLOURING.

THE artificial colouring of birds, especially Canaries, is a tricky artifice often practised by some, who, much to their shame and disgrace, resort to the defacing of Nature's works for the sake of gain, and to defeat those who pursue

a just course. I am, therefore, compelled to allude to the matter, having, during my many years' experience as a judge of birds, exposed very glaring instances. For the welfare and success of exhibitions, and for the credit of the fancy in general, every publicity should be 'given where instances of such gross fraud are found. By means of tests and close scrutiny, deep dyes and weaker colouring matters have been extracted from the high-coloured Canaries. I have known Lizard birds to have been tampered with on their feathers and legs; and Bullfinches, Virginian Nightingales, Cockatoos, and other specimens have been highly dressed with deep solutions and powder, for the sake of beautifying their appearance. The exposures made at some of the leading exhibitions, have no doubt tended much towards checking the evil which at one time was carried on to a great extent. In nine cases out of ten these attempted frauds are detected; but the judges not being aware in what way the impositions are to be palmed upon them, it behoves them to be doubly cautious, and not pass hastily over those specimens exhibited which at first sight seem to be the most likely for winning highest honours. An effectual check is to post up in every show-room the name of the person so offending, and frame a rule in the schedule prohibiting him from again exhibiting. There is a law to punish those who pass counterfeit coin; the man who exhibits birds with counterfeit plumage is no better, and committees and those who have the management of bird-shows have, or should have, their remedy, to a certain extent, against the evil. One case of bird-painting, but not, in this instance, in connection with a show, was that of a man who appeared before the magistrates at Reading for selling coloured birds. The man called at a person's house with two birds in cages, which he offered for sale, saying he was a servant,

and his master would not let him keep them ; and he must therefore, get rid of them. One of the birds (a very handsome one), the man said, had been sent to him by his brother, who was a sailor, from Spain. It was red about the head, on which it had a black feather gracefully curling towards its beak ; a tinge of blue on the breast, and its wings delicately shaded with yellow and green. The bird was purchased. The man was afterwards seen offering other birds for sale, and as he had got no others but those resembling that particular *one* sent by his sailor-brother, he was suspected of being a cheat. On examining the beautifully plumaged bird it was found that the gay colouring was a work of art and deceit, and that its graceful tuft had been gummed on its head ; in fact, it was only a common hen sparrow.

A FEW HINTS TO BREEDERS AND BIRD KEEPERS.

1. AVOID, as much as possible, the borrowing of birds, for there is a great probability of something occurring during the time the bird is in your possession ; this frequently gives rise to murmuring, which is far better prevented.

2. We all like to have our food clean and apart from impurities. It is necessary that birds, too, should have their food clean and wholesome, for by not supplying their seed free from dust and dirt, disease is often brought on. Every breeder of birds should be provided with a fine sieve, having a mesh sufficient to allow only the dust to pass through. Likewise use a sieve for the purpose of pressing through the egg, and bun or bread, which saves more time than when chopped with a knife. Use also a small hand-net for catching the birds when kept in a room or spacious fly. Supply fresh water daily.

3. Be an enemy to the greatest enemy birds have, *viz.*, the red-bug, or vermin. Although such a pest to birds, they may be kept in check by cleanliness, not allowing stale nests to lie about, and examining well all crevices and ends of perches. When a cage is infested, even when there is but one bird in, remove the bird to another cage, and scald and well clean the other. If you perceive any small grey spots or mouldy-looking appearances about the crevices of the cage, there the vermin is lurking. I have found train oil of much use in applying to the crevices of cages and nest-boxes.

4. On visiting a brother fancier's bird-room to look at his birds, be cautious, and do not suddenly point your finger close to the cage; serious accidents oftentimes occur to choice birds, especially those being prepared for exhibition, through such incautiousness.

5. Avoid all depreciating remarks concerning other fanciers' birds, extolling your own at the same time. Self-praise of your own stock is no recommendation.

6. If you wish to purchase a bird, do so from a respectable breeder or dealer, for it is better you pay a little more for one you may depend upon than buy from itinerant vendors.

7. Healthy birds should possess the following qualifications:—Compact and close feathers, wings not drooping, free from pant and wheezing, nostrils free from discharge, no inclination to keep the head under the wings, not to droop upon the perch, not to accumulate filth about the vent, or have a difficulty in discharging the excrement. The above are signs of ill-health.

8. BEWARE OF CATS.—Generally they are not to be trusted, however much you may believe you have checked them from interfering with your birds. They have a very nice taste, and are excellent climbers and bird-catchers. There are ex-

ceptions where cats have been kept for some time without touching birds, but as a rule it is contrary to their nature.

9. BEWARE ALSO OF MICE.—Much injury is often caused by birds becoming poisoned, owing to seed being impregnated with the filth of mice. I would advise them being caught in traps rather than have a cat for the purpose. Pussy might otherwise take a fancy to the birds.

The popular belief that the young birds are assisted by their parents in escaping from their shells receives the following correction in a work published by R. Laishley, entitled, "A Popular History of British Birds' Eggs." It states:—"The operation of leaving the shell is a very beautiful one; and exhibits very markedly the wisdom and contrivance of the Creator. The beak is furnished with a bony point, which afterwards drops off. This is protruded through the shell. By means of its feet as levers, the animal then turns itself a little, till by degrees the whole top of the large end is cut very cleanly off, and a passage is opened for the imprisoned chick to go free."

"Granivorous birds, or such as live upon vegetables, have their intestines constructed differently from those of the rapacious kind. Their gullet dilates just above the breast-bone, and forms itself into a pouch or bag, which is perhaps better known by being called the crop. This crop is replete with glands, the food being softened by the saliva it contains. The food is here prepared in a great measure for the young birds, as you may see both the cock and hen heave it up as it were when feeding their young. When birds take food for themselves, after becoming macerated, it passes from the crop into the belly, where it is ground between two pair of muscles, called the gizzard, covered on the inside with a strong ridgy coating, which rub against one another, and are capable of attenuating the hardest substances.

Their action is equal to teeth in other animals. The sand or gravel found in the gizzard is requisite in preventing the too violent action of the coats of the stomach against each other."

"In the construction of nests, every species of birds has a peculiar architecture of its own—this being adapted to the number of eggs, or the temperature and heat of the body. All small birds make their nests very warm, for having many eggs it is requisite to distribute equal warmth."

Birds kept in rooms or aviaries are more favourably circumstanced than when in small cages, for in the former the full use of their wings is brought into play. The following interesting remarks respecting the formation of a bird's wing are extracted from a paper, by the Duke of Argyll, published in 1865:—"The feathers of a bird's wing have a natural three-fold division, according to the different wing-bones to which they are attached. The quills which form the end of the wing are called the 'primaries,' those which form the middle of the vane are called the 'secondaries,' and those which are next the body of the bird are called the 'tertiaries.' The motion of a bird's wing increases from its minimum at the shoulder-joint to its maximum at the tip. The primary quills, which form the termination of the wing, are those on which the chief burden or flight is cast. Each feather has less and less weight to bear, and less and less force to exert, in proportion as it lies nearer the body of the bird; and there is nothing more beautiful in the structure of a wing than the perfect gradation in strength and stiffness, as well as in modification of form which marks the series from the first of the primary quills to the last and feeblest of the tertiaryes."

MULES, HYBRIDS, AND MULE BREEDING.

IF anything in bird breeding tests the patience of a true fancier most, it is Mule breeding, especially when endeavouring to breed high-class birds. Year after year many truly fine specimens have been exhibited at the various exhibitions. Were it not taking the liberty of naming the many veteran fanciers of Mules, I could mention numerous exhibitors who, with much honour and credit, have shown birds of great value. The practised fancier alone estimates the worth of good Mules. The uninitiated in the mysteries of muling often imagine they are possessed of a Mule when it is nought else than a peculiar marked or cross-bred Canary. Even those, I know for a fact, who have bred Canaries for many years, not high-classed birds for exhibition purposes, have laboured under a wrong impression. One striking instance came under my notice at a show held at Derby in 1866, and which I referred to in the *Land and Water* in October of the same year:—"I was standing close to a man who was examining a cage of six Silver-spangled Lizards, and on his being asked by another person what birds they were, he, in my hearing, told him they were Mules, bred from the Brown Linnet and Canary. Now this man had been a breeder of birds, according to his own statement, thirty years, and yet made so extraordinary an assertion. He had evidently bred nothing else but common birds, or at least he could have had no experience beyond a certain point, and he was quite indignant on being told he was mistaken in calling them Mules." Another instance in Derby was that of a breeder informing me he knew of had heard of a man breeding a splendid marked "Mule bird," as he termed it, which information coming to my knowledge, and loving a good Mule, I paid the owner a visit, and having examined his stock, but not seeing the

choice object of my special visit, I asked to be allowed to see his Mule, when he pointed to a cage just above my head, which, to my great surprise, contained nought else than a cross-bred bird betwixt a Lizard and common Canary! Now, I will only suppose this person breeding with this particular so-called "Mule," and a Canary, the following season with success, and as regards young stock, I firmly believe (for I could not make him think it was other than a Mule), he would feel fully convinced he was the possessor of hybrids.

I also paid a visit to Leicester in 1868, to see an old fancier who asserted he had a "clear Linnet and Canary Mule," for which he asked the sum of £4. To my great astonishment, although I doubted him having such a bird, I found it was a common bred hen Canary! I was once returning from a show at Middleton, near Manchester, where I had been judging, and on arriving at Buxton, a boy entered the railway carriage, carrying with him a covered cage. I asked the boy what he had got in the cage, when he replied, "A green Linnet Mule, his father said it was, and he (his father) had refused 10s. for it. It's a Derbyshire bred bird, sir." I could not help smiling at the boy's innocence and readiness, and also his statement of its being a Derbyshire bred bird, as though it were better than one bred elsewhere. On asking him to let me look at the bird, I found it to be a slightly marked common Green Canary, and not a "Green Linnet Mule." It has frequently been said that Mules will breed with Canaries, and that the first year, if it be a Mule hen, that the eggs from such will only be the size of a pea. This matter I have tested. I have had Mule hens go to nest and lay eggs the full size, but they have always been unfertile. I have devoted all possible attention in endeavouring to succeed in various ways, but always without any success, more than

experience. I have found that Goldfinch cock Mules will often become uncommon fussy with hen Canaries, and will pay as much attention as a Canary cock, and apparently perform all the functions necessary for producing young, as Mr. Hugh Hanly so truly observed. I have had cock Mules help to bring up young birds hatched from eggs from Canaries, and have often been pleased to notice a cock Mule throw up the food and feed the young as well as a Canary.

GOLDFINCH AND CANARY MULES.—The Mules bred from the Goldfinch and Canary are more beautiful than those of any other breed, especially the Jonques. I have never yet seen an entirely clear good specimen, equal in clearness and appearance to the Meals, although many hundreds of the best birds in England have come under my inspection. On the other hand, many fine clear Mealy Mules have been shown. There are six or eight classes set apart for these birds, *viz.*, two for Clear Mules, or as nearly approaching clear birds (clear for choice) as possible; two for Variegated or Even-Marked, which include birds marked about each eye, or each wing, or with a dark feather on each side of the tail; two (in some shows, not general) for Uneven-Marked birds; and two for dark Mules. In former years the dark Mules were not considered of much value, but by a wise alteration they were admitted into the schedules, and the consequence has been that many very fine birds have often been exhibited. The Mules in general favour are those even-marked about the eyes and wings.

Of late years they have been exhibited in such faultless plumage as to gain the attention of numerous admirers. I have been possessed of numerous fine specimens in my time, and am proud to say that at the Southampton show, in 1868, I succeeded in carrying off the silver cup and two silver medals with Mules alone. The famous

Jonque Mule gained for me a dozen first and second prizes at various exhibitions in England and Glasgow, for which honours he had travelled thousands of miles. Three years in succession I exhibited it at Glasgow, on the last occasion in company with a fine even-marked Mealy Mule, each of which won for me a first prize, and a couple of well executed gilt morocco trophies in the year 1864. The bird, with another specimen, somewhat inferior, soon afterwards passed from my hands to those of a gentleman residing near Manchester, for the sum of £10. But although my Jonque Mule was so excellent in every respect, I have since seen others shown equally as good from Prestwich (near Manchester), Sunderland, and Durham. The two best Jonque Goldfinch Mules I ever witnessed were exhibited by a Plymouth fancier, and won highest honours at the Crystal Palace Bird Show in 1870. Without exception, they were admitted to be the finest specimens ever seen in England in the memory of those who saw them. There have, during the past few years, been many beautiful Mealy Goldfinch Mules shown. One in particular deserves notice. This bird was bred by a member of the London Fancy "Hand-in-Hand" Society, who resided at Walworth, Surrey. The bird, after being exhibited at the Palace show and at Southampton, became the property of noted exhibitors living in Bristol, and near Leicester-square, London, but it soon passed into the hands of a Derby fancier, from whom it was purchased by a famous Mule exhibitor at Prestwich. The bird was eventually claimed by a gentleman at Durham. It was shown on many occasions, but was never defeated.

BROWN LINNET AND CANARY MULES.—Good Mules of this breed are scarce. It is not a common or everyday occurrence to breed Goldfinch Mules possessed of light or pied feathers, but it is more difficult to breed Brown Linnet Mules of much better appearance of plumage than a Sparrow.

Even the very best of them are much inferior in plumage to a Goldfinch and Canary Mule. The difficulty in breeding Linnet Mules light is great, but when they are so bred, the value of such is high, and the nearer they resemble the colour of a clear Canary the more they are enhanced in worth. They are rarely bred with uniformity of marking and in this respect they somewhat vary from Goldfinch Mules. Those regularly marked on the wings, and about the heads, with clear bodies, and in condition and plumage, are most prized. I have had several choice specimens which have won for me first honours. Linnet Mules, when well tutored under a good songster, make the best of song-birds, their harmony generally being so very melodious. Linnets are not so mischievous with the nests and eggs as Goldfinches, and if paired to a Canary hen will pay all attention to her and the young. When they take well to young birds they are excellent feeders, and will bring them up strong. I have known them sometimes to be unkind, approach a nest, and, without much ceremony, lay hold of the birds just hatched and throw them to the bottom of the cage, and mutilate them. They may be treated nearly the same as Goldfinches, but occasionally a little rapeseed (scalded) should be given. The seed known by the name of "kedlock," a kind of wild rape, is a good diet as a change. The Mules may be treated the same as Canaries, only a little more hemp and flax may be supplied occasionally.

SISKIN AND CANARY MULES.—The Siskin (which generally prefers to cling to the wires of a cage instead of roosting on the perch) will freely breed with the Canary, and some of the offspring take after the Siskin in plumage, being of a greenish or greyish-green appearance, and bearing the Siskin marks or lines on each side of the head over the eyes. I have bred several well marked with light or pied

feathers in the wings and tails. In size the Mules are a little larger than the Siskin, and are of close plumage. If brought up under a free song-bird they will sing very sweetly and free. I have had them almost equal to Canaries in song. They are very active, and somewhat pugnacious.

GREENFINCH AND CANARY MULES.—Mules of this breed are more bulky in form, showing much of the Greenfinch in plumage and beak; they are dull and moderate in appearance and colour, although good in feather. They are scarce worth the time and expense bestowed in breeding, and are much inferior in song.

BULLFINCH AND CANARY MULES.—I have certainly seen *two* specimens in my lifetime stated to be “Bullfinch and Canary Mules,” and those have been exhibited at the Crystal Palace shows, and have come under my hands for adjudication. With respect to these so-called Mules much doubt has existed. The first was exhibited at the show of 1870. In length and shape it partook much of the “Yorkshire” bred bird, and the only portion of the bird that at all resembled the Bullfinch was the peculiar shape of the upper mandible. The form of the beak exactly resembled that of a Lizard Canary I once had with a similar curvature. I have seen many peculiarities in the beaks of birds, so that I could not place much reliance on that point, and the bird being a clear specimen was a very unlikely colour for a cross betwixt a Bullfinch and Canary. Many other judges had doubts concerning the so-called Bullfinch and Canary Mule. Moreover, one of the best naturalists of the present day expressed his belief that the bird was only a Canary with a malformed beak. At the following show another specimen of a “Bullfinch and Canary” mule was shown, but this, although appearing a more likely one of the kind, was considered by those fully competent to form an opinion to be a cross between the Bullfinch and Chaffinch—indeed there

is generally considerable mystification about the matter. Still I do not wish to discourage any breeder from trying, and am not going to assert that such has not been the case.

HYBRIDS.—Specimens bred from the Bullfinch and Goldfinch, and Greenfinch and Goldfinch, are well worthy of notice. For several years many exceedingly fine birds, bearing distinct evidence of each breed, have been seen at the best shows.

When breeding with Goldfinches, Linnets, and Siskins, supply each with a piece of the following food:—Soak a piece of stale bread the size of a ball in cold water for an hour, afterwards squeeze out the water, and rub in half a thimbleful of cod liver oil, and give to each a bit the size of a nut, with some maw-seed. This will tend to keep them bright and close in plumage. Now and then give a little crushed biscuit, a few groats, some flax seed, no rape, unless scalded (and that to the Linnets), and not too much hemp. Dandelion, as early in spring as convenient, is very necessary.

MULE BREEDING.—As the Goldfinch breeds more freely with the Canary than any other British bird, I will confine my remarks more particularly to it, and give my own experience and observations. In the “merry month of May” I commence Mule breeding, having previously prepared my Goldfinches by extra feeding. I have many instances noted down of Mules having been bred prior to the time I have named—even as early as February, but in that particular instance the Goldfinch and hen Canary had been kept in a room during winter, where there was fire and gas. Birds so kept will breed earlier; but they begin to moult at the time they ought to be doing best. Fire or gas heat I do not recommend, preferring to wait until genial weather should set in.

Goldfinches give signs of good condition when in full and continuous song, by freely “slamming,” and frequently

repeating the "lippet-slam-sir-widdy" notes, which are considered the most choice. A Mule breeder may judge whether his Finch is "well-up" by the utterance of the "chee-ter-wee-yeer" notes, and the amusing rudder-like swaggering of its tail immediately upwards. I never attempt to breed with a yearling Goldfinch, preferring an old bird—a white-legged one, as it is termed by many, the colour undergoing a change from black to white, through being kept and moulted in the house. Many breeders prefer a dark-legged bird—a one-year-old, fresh caught. To test whether they can breed from yearling Finches let them be taken when they are "grey-pates," and tried the following spring. Possibly here and there an odd Finch may be forward enough for breeding; but, as a rule, they will not breed in the house when only one year old. Some persons advise a "three-by-six," others a "cheverel." The former is known by having the three outer tail feathers "mooned" with the white mark in the end of each, and the six feathers in the centre being black. All Goldfinches are not so marked, most of them having but two of the outer tail feathers on each side with the white mark upon them. A "cheverel," or "chibald," is known by the mark on the throat, dividing the red around the beak, but sometimes only a small speck of white appears. This latter kind is in most demand, and some fanciers believe they cannot breed a good Mule unless they possess a "cheverel" Finch. This is a complete delusion. I have had varied success from all kinds. One of the best Goldfinches I ever had was a small bird, very indifferent in colour. This bird, soon after coming from Plymouth, lost an eye, but it did not prevent it breeding freely with a mealy-crested—almost a white hen—with which I had good success. With this pair I bred some very handsome Mules, some almost clear—one, in particular, after taking a first prize, finding a home at

Culke Abbey, near Derby. The mother of this Mule never bred a nest of young without some of them being very light and well marked; but the Goldfinch having died, I parted with the hen, and the following year the gentleman to whom I sold her bred from her a nest of Mules "as dark as mice." My one-eyed Finch was neither a "three-by-six" nor a "cheverel"—nothing but a common-looking bird. On the other hand, I have bred good Mules from fine looking Finches possessed of plenty of showy colour, and have proved to my entire satisfaction that good Mules can be bred without selecting a "cheverel" Finch.

For several years I obtained young Goldfinches (nestlings) from a pear-tree, in an orchard at a place called Barrowash, near Derby. I kept them until they were two years old, and bred from them—some of the breeding-hens being good marked birds, others indifferent and dark. In connection with Goldfinches, those I reared yearly from the nests did not exhibit the wildness and fluttering habits of other Finches. They became so quiet and free that they would feed from my mouth or pull at my whiskers when placing myself close to the cage. Mule breeding, as I have before remarked, requires much attention and patience, and many fanciers are disappointed, season after season, with the appearance of the young brood, although the hens have been of a good strain; a clear bird, which it often takes years to obtain, which is evenly pencilled about the eyes, with a pair of faultless wings, bearing a rich yellow throughout the bars of the same, and with a fine bronze tinge on the face, is invaluable. These points in a fine specimen, added to bloomy appearance throughout, and prime condition, accompanied with fair size and form, and a pair of bright, full eyes, peering through a clean cut and snake-like head, gives quite an aristocratic appearance to the Mule. Unlike Norwich, London Fancy and Lizards, they do not deteriorate

in appearance after moulting. I have known first-class birds to realise as much as £10 each. To attain success, every attention must be paid to the Finches, not only at the breeding time, but during the winter previous, respecting their diet. I vary the diet with flax, millet, gfoats, mawseed, coarse Scotch meal, a little egg, and stale bun, and thistle-seed. When thistles are ripening, I generally secure a supply of heads, but cut off the down previous to placing them with the Goldfinches. Now and then a small piece of the soaked bread, with cod-liver oil rubbed into it, has a tendency to prevent asthma. Breeding in cages I prefer for muleing—the birds are more under control, especially the Goldfinch. I have tried each way. On one occasion I had placed half a dozen hens with a couple of Finches in my room, supplying them with the requisite building materials, and all went well for a time ; but one day, on entering my room, I saw portions of egg-shells here and there. On examining the nests one day, not an egg or bird was to be found. The Goldfinches had been at work. Upon the floor, here and there, I found eggs containing birds near upon chipping, and also young birds on the floor, destroyed and mutilated about the wings and feet. I set my hens to work without a mate, and with the first that commences to build I place the Goldfinch. When another hen begins nesting, I place the Goldfinch with her for a time, changing him from one to the other. One Goldfinch is sufficient for three or four hens. I prefer using the Goldfinches with several hens, but never allow them to remain with the hens up to the time of laying, for fear of the eggs being broken. Hens not paired with the Goldfinches will sit well upon their eggs, so that there is some difference from Canary breeding. When two birds are paired together, of course it would be unwise to take away the male, for possibly the hen would fret, and leave her eggs.

In other respects hens for Muleing may be treated as in Canary breeding. They are liable to the same accidents, but are not so subject to be egg-bound, owing to the time of the year (May) when they are put up for Mule breeding. Previous to breeding with the Goldfinch, if the hen is of a strain known to throw the young with broken or pied plumage, I contrive to have a nest for her with a Canary. According to the colour of the hen, so I place with her a male Canary of the same colour. I generally breed my Mules from hens termed common hens, of a lemon or brimstone appearance. I have also bred several excellent Mules from the Yorkshire hen; they are more sleek and somewhat longer than when the Mules are bred from a short thick-set hen. I have frequently bred from Norwich hens, but with less success. Still, when light-coloured Mules are bred from Norwich hens, they are more bloomy. I have known really first-class Mules to have been bred from Norwich hens. It does not follow that Mule-breeding hens should always be clear or free from dark feathers. I have bred from a heavily marked strain, and had nice marked Mules, and have known others to be equally fortunate in this respect. But I prefer breeding from a strain from which good marked or light-coloured Mules have been bred. When I can contrive to obtain a nest of young, and afterwards breed them in-and-in as regards relationship and colour, I prefer it. Such birds I have proved to be most reliable for marked Mules. I know many who make a yearly practice of breeding Mules, who would not waste their time by Canary breeding.

Most Mule breeders will agree with me that there is much chance work in Mule breeding; but on this point I am satisfied, that if a breeder were to try a dozen hens bred from known Muleing strains, against the like number of chance or hap-hazard hens, that the advantage would be considerably in favour of the former. Light-coloured Mules may be

known as soon as they are chipped, owing to their light or flesh-coloured appearance. If they appear dark in the skin when they are chipped, make up your mind for dark Mules. There is much prying and quizzing in this respect, and it has often amused me to hear some breeders assert that they have a "clear Mule in the nest," when by chance or accident it may have happened that the male Canary has had access to the hen whilst breeding with the Goldfinch.

The following are the points by which Canary Mules are judged:—

BEAKS—rather larger and more pointed than the Canary's.

HEAD—not so round and full as the Canary's.

NECK—somewhat slender.

EYES—fierce, spectacle-marked, with dark feathers around.

FACE—of a bronze red hue, the stronger the colour the better, and as free as possible from slaty-coloured feathers about the cheeks.

BODY—smart throughout and clear, having no dark or slate-coloured feathers about the loins or uppermost part of the tail.

WINGS—smaller flight feathers dark, the larger flight feathers barred with a yellow bloomy tinge from the shoulders.

FEATHERS—throughout close and in good condition. The yellow or jonque specimens should possess strong colour. The mealy specimens almost white, with bloomy yellow tinge strong on the large flight feathers, and slightly showing on the breast.

TAIL—clear preferred, but if having a dark feather on each side, which is frequently the case in good specimens, to be considered a good show bird.

LEGS AND FEET—not coarse, twisted awry, or nails deficient.

Clear Goldfinch and Canary Mules should have similar properties to the above, excepting the spectacle eye-marks and smaller flight feathers. Such birds are rarely bred, but they are of great value. Like the above, there are two kinds, the jonque and mealy.

In shape and form the dark Goldfinch and Canary Mules are the same as the foregoing, but should be dark on the wings and tails. There are jonque and mealy specimens. The former should possess as much golden bronze appearance as possible throughout. The face around the beak should be very bright, presenting a rich bronze scarlet. The breast feathers should not be light, but of a rich golden tinge. The mealy specimens are a little stronger in build, and should have as much colour as possible, but presenting a fine mealy tinge.

The Brown Linnet and Canary Mules resemble the Canary in the light feathers throughout; but size, condition, plumage, and regularity of marks, make them more showy and valuable. There is but one class for these birds, although they vary in appearance. Some are nearly white, others of a yellowish or buff colour. First-class specimens are rare, the difficulty in breeding such being very great.

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